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THE INDUSTRIAL REORGANIZATION ACT

HEARINGS
BEFORE THE
SUBCOMMITTEE ON
ANTITRUST AND MONOPOLY
OF THE
COMMITTEE ON THE JUDICIARY
UNITED STATES SENATE
NINETY-THIRD CONGRESS

SECOND SESSION

ON

S. 1167

PART 5

The Communications Industry

JUNE 20, 21, 25, 27, 1974

Printed for the use of the Committee on the Judiciary

(Pursuant to S. Res. 255, Section 4)



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THE INDUSTRIAL REORGANIZATION ACT (S. 1167)

(The Communications Industry)

THURSDAY, JUNE 20, 1974

U.S. SENATE,
SUBCOMMITTEE ON ANTITRUST AND MONOPOLY,
OF THE COMMITTEE ON THE JUDICIARY,
Washington, D.C.

The subcommittee met at 10:05 a.m., in room 1114, Dirksen Senate Office Building, Hon. Philip A. Hart (chairman of the subcommittee) presiding.

Present: Senators Hart and Hruska.

Staff present: Howard E. O'Leary, Jr., chief counsel; Gerald Hellerman, special financial adviser; Janice Williams, chief clerk; Peter N. Chumbris, minority chief counsel; and Charles E. Kern II, minority counsel.

Senator HART. The committee will be in order.

Today we are returning to our examination of the problems and business practices arising out of the new competition which the phone companies, A.T. & T. and others, are facing.

At an earlier set of hearings we discussed the general scope of this new competition which comes principally out of new technology and two FCC decisions. First, the technology opened the doors for users to attach non-Bell equipment to their lines, PBX's and answering devices. The second allowed non-Bell companies to transmit voice or data.

Each has led to the founding of several hundreds of new companies.

Competition of this type is a new thing for A.T. & T. It has been considered a natural monopoly. It is accustomed to being the principal, if not the sole supplier of these services as well as which equipment will be available.

At earlier hearings several witnesses suggested that A.T. & T.'s methods of meeting this new competition raised some serious questions of possible antitrust violations. The suggestion was made that the phone company had a natural tendency to engage in these practices because of its structure and its dominant position.

Ideas were suggested as to how, whether under the Reorganization Act which the subcommittee is considering or present law, the Bell System could be restructured. Some recommended the divestiture of A.T. & T. Long Lines, and others the spinning off of Western Electric.

Since the last set of hearings the subcommittee has developed more detailed information on competitive practices of this industry and how they are affecting businesses and the consumer.

During these hearings we will examine some of the allegations of anticompetitive practices, and then in July A.T. & T. will be asked to respond to these allegations, or will be given the opportunity to respond.

It had been our intention to hear from five witnesses today. However, earlier in the week the full committee of the Judiciary scheduled a meeting to begin at 10:30. Under the rules we would be required to suspend at that time.

Our one witness this morning, however, was under an especially difficult travel obligation and it was agreed that we would receive her testimony. I am grateful to Senator Hruska for his willingness to do this at the cost of inconvenience to his own schedule.

Our witness is Mrs. Julie A. Ashorn. Mrs. Ashorn is employed as a travel agent for Knox International Tours in Houston, Tex. She is appearing here today pursuant to a subpoena issued by the subcommittee.

Good morning.

I understand that a written statement had been prepared by counsel for Knox International Tours. He is located in Tulsa. And that the statement hasn't yet caught up with us.

Let me see if, based on the questions that the staff has developed, we can get into the record the information which is of interest to the subcommittee by a few general questions.

Directing your attention to the period from January 1974 through May of 1974, what was your responsibility and assignment for Knox International Tours?

STATEMENT OF JULIE A. ASHORN, TRAVEL AGENT, KNOX INTERNATIONAL TOURS, HOUSTON, TEX.

Mrs. ASHORN. I routed and booked and wrote airline tickets for Southwestern Bell Telephone.

Senator HART. I'm going to ask Mr. O'Leary, who developed the questions, to ask them. I think that would be much more effective.

Mr. O'LEARY. Mrs. Ashorn, would you give us a little background with respect to the relationship between Knox International Tours and Southwestern Bell, how you happened to be making these travel arrangements for Southwestern, or for Bell personnel?

Mrs. ASHORN. Bell has an office next door to our office on Long Point Road in Houston, and the supervisors would come into our office and order travel for themselves and told us that they would be moving a lot of people from other parts of the country into Houston

on a temporary basis, and they would be going to their respective cities every third or fourth week, depending upon the contract they signed with Southwestern Bell.

And they were looking for some way to expedite the movement of these people, to help them out, to give them as few problems as possible.

And we said there was a way that we could set it up, that we could help them in their routings and writing their tickets. And consequently we got the contract.

Mr. O'LEARY. Let me see if I understand this.

You indicate that people from other parts of the country who were Bell employees were coming into Houston to work at this control center which was close to your travel agency. Is that correct?

Mrs. ASHORN. Yes.

Mr. O'LEARY. And approximately how many people are we talking about, who came from other parts of the Bell System to Houston during January through May of 1974?

Mrs. ASHORN. There were approximately 1,000 people that were brought down, but they had them set up in three separate divisions in Houston, a north, a south, and a west division.

We were responsible for the west division which had the major portion of the people who were brought in, and we were talking about 450, maybe 500 men.

Mr. O'LEARY. And these people had the option, the 450 to 500 men, of going home every third weekend; is that correct?

Mrs. ASHORN. Every third or fourth weekend.

Mr. O'LEARY. You made the travel arrangements for these 450 or 500 individuals?

Mrs. ASHORN. Yes.

Mr. O'LEARY. Do you have any idea of approximately how much the dollar volume of this Bell account would be on a monthly basis for Knox International Tours?

Mrs. ASHORN. Well, in February and March it was \$61,000 for 1 month and \$60,000 for the other month.

Mr. O'LEARY. Did there come a time when you had a telephone conversation with an employee of Southwestern Bell about the use of Continental Airlines for these people?

Mrs. ASHORN. Yes, sir.

Mr. O'LEARY. Would you tell us who that person was?

Mrs. ASHORN. That was Mr. Bill Comfort, who is supervisor in charge of the control center and taking care of the borrowed people's travel.

Mr. O'LEARY. When you say "borrowed people" you are referring to these 450 to 500 who would be going home over 1 month's time?

Mrs. ASHORN. Yes.

Mr. O'LEARY. Approximately when did this conversation take place?

Mrs. ASHORN. It was in the early part of March.

Mr. O'LEARY. 1974?

Mrs. ASHORN. Yes.

Mr. O'LEARY. To the best of your recollection, tell us what was said.

Mrs. ASHORN. Mr. Comfort told me not to book Continental Airlines, and I asked him why. And he said that Continental Airlines had removed Southwestern Bell equipment from their offices and had installed a competitor's equipment hooked up to their computers.

Mr. O'LEARY. What, if anything, did he say with respect to doing business with Continental because they put this competitor's equipment in?

Mrs. ASHORN. He said he didn't want me to book on that airline because of them having removed from their office the Bell equipment.

Mr. O'LEARY. Did you have any additional conversations with Mr. Comfort on this subject; namely, not booking Continental Airlines?

Mrs. ASHORN. Yes, sir. About 3 days later I had occasion to speak to him, and I asked him to what extent to not book on the airlines. And he clarified it, that if there were two carriers going at the same time, maybe 15 or 30 minutes apart, then I was to book the other carrier and not Continental. However, at the same time, I was not to inconvenience the man by making him change planes or getting him in at a very unreasonable hour.

Mr. O'LEARY. Do you recall anything else being said at this second conversation?

Mrs. ASHORN. Well, he mentioned that one of the supervisors, a Mr. Adkins, became very upset when he saw the Continental ticket jackets laying on the girl's desk that disbursed these tickets to the supervisors.

Mr. O'LEARY. And what, if anything, did you say when he mentioned this about Mr. Adkins being upset?

Mrs. ASHORN. Well I told him we could always take the Continental tickets and put them in another carrier's ticket jacket.

[Laughter.]

Mr. O'LEARY. Thank you, Mrs. Ashorn. I have no further questions, Mr. Chairman.

Senator HART. Senator Hruska.

Senator HRUSKA. Mrs. Ashorn, how long have you been working for Knox International Tours?

Mrs. ASHORN. Well, at this particular time I came back to Knox in October of 1973, and I'm currently employed.

Senator HRUSKA. Had you been with them before?

Mrs. ASHORN. Yes, sir. Approximately a year and a half. And I left for 1 year's time and went with another agency and then returned to Knox.

Senator HRUSKA. Are you still employed by Knox International Tours?

Mrs. ASHORN. Yes, sir.

Senator HRUSKA. You are on vacation?

Mrs. ASHORN. Not yet.

Senator HRUSKA. You say the bulk of the tickets were for these people who commuted. Where did they commute from?

Mrs. ASHORN. Well, they were brought in from New York Bell, Pennsylvania Bell, Ohio Bell, Rocky Mountain Bell. They came from the State of Washington.

Senator HRUSKA. I see; from Houston to these different points?

Mrs. ASHORN. Yes.

Senator HRUSKA. And how long had these tickets been procured from the Continental Airlines, to which you refer?

Mrs. ASHORN. I don't understand.

Senator HRUSKA. Well, you say that these tickets had been purchased and the bookings had been made by your tour agency on the Continental Airlines for the purpose of these travels. How long had that been the arrangement?

Well, let's take a regular weekend: 12 people would come to you and say "We want to go home," and you bought for them and booked for them space on Continental Airlines, is that true?

Mrs. ASHORN. No, sir; we write the tickets ourselves. We don't buy them from Continental Airlines.

Senator HRUSKA. You do what?

Mrs. ASHORN. We write the tickets ourselves. We have ticket stock in our office.

Senator HRUSKA. Yes; but you book the space for them?

Mrs. ASHORN. Yes, sir.

Senator HRUSKA. Well, now, did you book that space on Continental Airlines?

Mrs. ASHORN. Yes; I booked space on Continental.

Senator HRUSKA. Did you book space on other airlines as well?

Mrs. ASHORN. Yes, sir. On American, Braniff, Delta, Eastern, all of the carriers.

Senator HRUSKA. And you used your judgment where you wanted to place the bookings?

Mrs. ASHORN. Yes, sir; in most instances; yes.

Senator HRUSKA. Are the Continental Airlines complaining about this, these occurrences that you testified to.

Mrs. ASHORN. I don't know what Continental is doing.

Senator HRUSKA. You don't know that?

Mrs. ASHORN. No.

Senator HRUSKA. Have they ever contacted you and wondered why \$60,000 worth of business that used to come in, no longer came in from your tour agency?

Mrs. ASHORN. Continental wasn't getting the entire \$60,000. Continental doesn't have the routings up to New York, for instance, they don't have the routings—

Senator HRUSKA. Whatever amount there was, there was a drop in business and they never complained to you?

Mrs. ASHORN. Not to me; no, sir.

Senator HRUSKA. Has the staff contacted Continental?

Senator HART. Continental was one of the five witnesses scheduled, and are here today.

Senator HRUSKA. And they will testify tomorrow. Well that's fine. Then we'll get some more details from them.

Apparently, there are alternate routes on some of these travels, are there not?

Mrs. ASHORN. Yes, sir.

Senator HRUSKA. For example, to Denver; what lines could you take to Denver from Houston?

Mrs. ASHORN. Continental, Texas International.

Senator HRUSKA. Braniff International, Western?

Mrs. ASHORN. Not out of Houston. I don't know if Braniff goes to Denver or not.

Senator HRUSKA. Are the fares on alternate routes the same?

Mrs. ASHORN. Approximately; yes. Continental does have—

Senator HRUSKA. What charges does the tour agency receive for your services?

Mrs. ASHORN. We make no charge for our services. We're paid by the airlines, in effect.

Senator HRUSKA. What charges do you make to the airlines?

Mrs. ASHORN. They give us 7 percent of each ticket that is written, of the base fare.

Senator HRUSKA. And that is a standard arrangement as to all airlines; is it not?

Mrs. ASHORN. That's right.

Senator HRUSKA. As a matter of fact, to all tour agencies?

Mrs. ASHORN. Yes, sir.

Senator HRUSKA. Is the service any different on these different airlines?

Mrs. ASHORN. Yes, they are.

Senator HRUSKA. It's different?

Mrs. ASHORN. Yes.

Senator HRUSKA. Is Continental better or worse than the other airlines?

Mrs. ASHORN. Continental is one of the better carriers.

Senator HRUSKA. The equipment is better?

Mrs. ASHORN. Not particularly. They're an on-time service, and their in-flight service is exceptionally good, as opposed to Braniff, say.

Senator HRUSKA. If there were two or three alternates to a given city how would you choose one airline over another?

Mrs. ASHORN. Well, it would depend on whether or not the man was able to leave at 8 o'clock in the morning or at 5 o'clock in the evening, and whether or not he would have to change planes, and through which city he would have to change.

For instance, I would not send him through O'Hare Airport if there were any other alternate.

Senator HRUSKA. You find me in sympathy with that. I avoid O'Hare as much as I can, too.

Mrs. ASHORN. Dulles is getting just as bad.

Senator HRUSKA. But what if the routes are just about the same and the connections were about the same and the times were about the same? How did you make a decision to use one airline rather than another?

Mrs. ASHORN. I put them on the best carrier. And whether or not there was meal service involved.

Senator HRUSKA. Is there an official rating as to which is the best carrier? And could a tour agency be charged with discrimination? They might think Continental is the best, but Braniff might think that Braniff is the best? Have you ever met with complaints like that?

Mrs. ASHORN. This is a personal opinion from having flown the different carriers.

Senator HRUSKA. Somebody must make the choice. And until you get a complaint you use your own judgment?

Mrs. ASHORN. Yes, sir.

Senator HRUSKA. Unless you get instructions to the contrary.

Mrs. ASHORN. That's right.

Senator HRUSKA. And this time you got instructions to the contrary and tried to carry them out; is that right?

Mrs. ASHORN. Yes, sir.

Senator HRUSKA. I think that's all, Mr. Chairman.

Thank you for coming.

Senator HART. As far as revenue to the travel agency, at least in the case of your agency, is there any difference to you whether the booking is with carrier A or carrier B?

Mrs. ASHORN. None whatsoever.

Mr. HELLERMAN. One further question, if I may.

What impact did Mr. Comfort's first phone call have on you with respect to booking on Continental Airlines?

Mrs. ASHORN. Well I tried not to book Continental Airlines. I didn't know exactly to what extent I was supposed to go, just how far I was supposed to go not to book Continental. Was it a total "no" or "possibly?" So that's why I asked for clarification several days later.

At the time I apparently did not have enough travel orders from control center to where I was using Continental routings, but in the meantime I guess I did receive quite a large stack that could involve Continental routings. And I did need further clarification as to what I should do with that number of men.

Mr. HELLERMAN. Were you ever told by other Bell personnel that Bell people stopped doing business with other companies or hotels, motels, if they purchased their own telephone equipment?

Mrs. ASHORN. Yes. There was a Bell supervisor from Pennsylvania who related to me they were to have a very large seminar in a Holiday Inn in Pennsylvania, and it was very close to their particular location where, if they were having a school or something, they would rent a meeting room of some type. And when they discovered that they had taken out Southwestern Bell equipment, they moved

the entire meeting, or seminar, down the street; which was quite inconvenient for the Southwestern Bell people.

Mr. HELLERMAN. Thank you.

No further questions.

Senator HRUSKA. Mrs. Ashorn, if after reading the statement, we have any further questions may we correspond with you and ask the questions and expect a reply from you?

Mrs. ASHORN. All right.

Senator HRUSKA. Does the staff think it is all right? [Laughter.] Apparently so. And that's a good source of getting advice.

Senator HART. You should come to our next meeting. They don't always think before they talk. [Laughter.]

Mrs. ASHORN. I have the same problem.

Senator HART. We are adjourned, to resume at 9:30 a.m., tomorrow in room 2226, Dirksen Senator Office Building.

Thank you very much.

[Whereupon, at 10:28 a.m., the subcommittee adjourned, to reconvene at 9:30 a.m., June 21, 1974, in room 2226, Dirksen Senate Office Building.]

[The following was received for the record. Testimony resumes on p. 2755.]

EXHIBIT 1.—*Letter From Mr. Guess to Mr. Hoverstock Re Cancellation of Business After Discontinuing Service*

APRIL 9, 1971.

Mr. N. K. HOVERSTOCK,
General Manager,
Southwestern Bell Telephone Co.,
Houston, Tex.

DEAR MR. HOVERSTOCK: I was astounded to get your message via your secretary cancelling your air-line tickets. She said you didn't intend to do business with a company that was not doing business with Southwestern Bell. In light of your commercial, "We may be the only telephone company, but try not to act it" and in view of the fact that I still do a substantial business with Southwestern Bell using phone numbers 626-2990, 524-0852 and 526-2247 and all my employees and friends use your company, I think it was unwise to risk the amount of business I could divert for the small amount of business your company did with us.

Sincerely,

INTERNATIONAL TRAVEL AGENCY, INC.,
STEVEN GUESS, *President*.

EXHIBIT 1a.—*A.T. & T. Response to Testimony of Mrs. Ashorn*

Southwestern Bell said that the company does not have a policy of favoring one air carrier over another. The company said an investigation, made after Mrs. Ashorn's testimony this morning, does indicate that an individual, acting upon his own, had instructed the supervisor to inform her to favor another carrier if the schedules were virtually the same and it would not inconvenience the employee.

The investigation also disclosed that to date this year Southwestern Bell has spent about \$75,000 with Continental Airlines. The company said that \$48,000 of that total was handled by the Knox Agency. There is no basis for comparison with the prior year, because the men were not brought in from other companies to help improve the quality of service in the Greater Houston area until after mid-year.

Exhibit 2.—Prepared Statement of Edward Burge

PREPARED STATEMENT OF EDWARD BURGE, OWNER, TROPICANA LODGE, FRESNO, CALIF.

The Tropicana Lodge has 115 sleeping rooms of which five are suites. It has catering accommodations to serve 400 people. It has full restaurant, dining room, coffee shop, and night club facilities.

I opened the Tropicana Lodge in October, 1962 at which time I was required to pay a \$5,000 deposit for telephone installation. This deposit remained with the telephone company for a period of approximately five (5) years with no interest on my money. I enjoyed very good service from the telephone company and had a monthly bill to the company of between \$2,600 to \$3,000. This service continued for approximately 11½ years at which time the enlargement of the lobby was required by Northern California Automobile Club, Triple A, and Best Western in order for me to retain my excellent rating. I then asked the telephone company to update my equipment. They refused and I started negotiations with Scott-Buttner Communications, Inc. to install my own telephone system; the benefits of which are, less space which was badly needed to enlarge my lobby. My new telephone system would also encompass more features such as no operators, per se, more control on telephone calls, a savings in cost, and, of course, in 10 years owning this system outright. Some of the problems I encountered with the telephone company are as follows: The telephone company charged \$1200 as a termination charge or disconnecting charge for my old system. Pacific Telephone and Telegraph Company of whom I enjoyed approximately \$30,000 a year business boycotted my place of business and to date, do not put any of their people in my motel, they do not book any more Evaluation Boards, Christmas Parties, they do not attend Happy Hours in the cocktail lounge, and I get feedback from any people employed by the telephone company that they were told not to patronize the Tropicana Lodge. My ex-manager, Mr. Dave Stephenson, left my place of business and was managing the Hilton Inn in Bakersfield from January, 1973 through August, 1973, and had as his guests several key people from the telephone company in Fresno and meeting with them one evening he was told by a Mr. Jack Tranberg and Hank Dittmar, (Pacific Telephone Executives), that the telephone company would not be using the Tropicana Lodge any more because we did not have their equipment. Similar statements have come from other key people with Pacific Telephone Company.

Recently, I purchased advertising at the local airport here in Fresno which required a direct line from the airport to my lobby. I requested on many occasions that the direct line be installed and to date, nothing has been done, even though my contract with the advertising company has been going on with a \$110 a month payment for approximately three months. The telephone company came to my lobby and removed the only pay telephone that my guests could use for outside calls. They told me that this pay phone was not producing enough revenue—this after 12 years of being installed on my property. Then I was told they could only leave this pay phone installed with an exorbitant monthly charge. However, they left the booth in the lobby!

With my new telephone system there is an interconnect device of which I am told is a protector system to protect telephone company equipment. Engineers and electrician specialists have informed me that this device is absolutely unnecessary due to the fact that telephone equipment is protected and also my private telephone system encompasses telephone protector equipment. This device causes untold problems with my telephone system. Some incoming calls are delayed 5 to 10 minutes and a special operator is required. The service people with Scott-Buttner were called because of these troubles and we were told that it is a telephone company equipment trouble and Scott-Buttner in turn has to call the telephone company and undue delay is caused in service to my guests. The interdevice has a monthly rental cost of \$374.10.

After many many years of paying my bill on time to the telephone company, they now demand payment even before I have a chance to voucher the bill to be paid to them. At the time of the installation of my new telephone system I asked that touch tone facilities be installed and was told that this feature was

not available until May, 1973. However, I had a private line telephone installed in the Catering Office that had the touch tone feature. To this date, the telephone company still has not incorporated a touch tone feature for my system.

In view of all of the above, it is humbly requested that this committee look into unfair business practices being performed by the local telephone company in Fresno, California.

Respectfully submitted,

EDWARD BURGE.

Enclosures:

MAY 6, 1974.

MR. WES ECKELS,
Pacific Telephone Co.
Fresno, Calif.

DEAR WES: Please install a direct line from the Fresno Airport to the Tropicana Lodge. Their address is 4061 North Blackstone Avenue. Our understanding is that it will take about two weeks after you receive this letter for installation.

If you have any questions regarding location of the phone at the Tropicana Lodge, please contact Mrs. Burge at 222-5641. As per her request she would like a beige phone. Also she is already paying for advertising. A response to this letter as soon as possible would be appreciated.

If you have any other questions, please do not hesitate to call me at 486-3403. Thank you.

Sincerely,

MARY LANEY,
Customer Service Representative.

THE PACIFIC TELEPHONE & TELEGRAPH CO.

MR. BOB QUAM,
Scott-Buttner Corp.
Fresno, Calif.

DEAR BOB: I have been advised by our Division Traffic people that the earliest possible relief date for Touch-Tone service is either the 224 or 226 prefixes is May, 1973.

Sincerely,

WES ECKELS,
Communication Consultant.



EXHIBIT. 2a.—*Letter From Edward Burge Responding to Questions by Subcommittee in Letter of July 3, 1974*

TROPICANA LODGE,
Fresno, Calif., July 12, 1974.

HON. PHILIP A. HART, *Chairman,*
Subcommittee on Antitrust and Monopoly,
Washington, D.C.

DEAR SENATOR HART: Pursuant to your request in your letter of July 3, 1974, I am responding to the questions you have enumerated below.

1. (Q) How much space did the Pacific Telephone and Telegraph equipment occupy as compared with your new telephone system?

(a) The P.T. & T. equipment occupied a room 14' 16". The new telephone system occupies 2' 4".

2. (Q) In your statement, you represent that you paid a \$1,200 termination charge to Pacific Telephone and Telegraph for equipment which you have used for approximately twelve years. Is this termination charge a standard practice by Pacific Telephone and Telegraph?

(a) To my knowledge, I believe it is so.

3. (Q) Was your motel, in fact, known locally as a telephone company place?

(a) Yes.

4. (Q) There is another motel located next to yours. Did the Pacific Telephone and Telegraph personnel who used to frequent your facilities begin doing business with that motel after you acquired your telephone system? If so, how do you know it?

(a) It was stated to me verbally, and in the statement I submitted to the Sub-Committee, I included pictures of the telephone company's trucks.

5. (Q) Have you recently attempted to solicit Pacific Telephone and Telegraph personnel to use your facilities again?

(a) Yes.

6. (Q) What was the response to any such attempt?

(a) Mr. Echols of the company told me that the Telephone Company could stay where they wanted.

7. (Q) With respect to your problems in obtaining a direct line between your motel and the airport, how long do you think it should take to have this line installed?

(a) I would say approximately two weeks. Our original request for this service was made in April and as of this date, we still do not have the direct line.

8. (Q) Do other motels located in your general vicinity have direct lines to the airport?

(a) Yes.

9. (Q) In connection with the pay telephone which Pacific Telephone and Telegraph Company removed from your lobby, do you have any additional thoughts as to why they removed the telephone?

(a) Only that it would put more of a load on my telephone system.

10. (Q) In connection with the manner in which you pay your telephone bill, did you mean by your statement that up until the time you purchased your telephone system, the telephone company did not bother you if you paid your bill ten or so days late, but that it now insists on immediate payment?

(a) Immediate payment is demanded when the statement is received, without allowing any time to voucher long distance calls and charges to determine what is due to them and what is not due to them.

11. (Q) To your knowledge, have other motels in the Fresno area purchased their own telephone equipment?

(a) Yes. The Piccadilly Inn, Ramada Inn, Village Inn, Sheraton Inn, are just a few.

12. (Q) If so, did Pacific Telephone and Telegraph personnel continue doing business with those motels after the installation of their own telephone equipment.

(a) Not to my knowledge.

13. (Q) What is your opinion as to the size and influence of the Bell System?

(a) Much too large for this community, therefore wielding an unfair influence over the general public. The Bell Telephone System has a complete monopoly and as such can dictate its own terms over a captive community.

Thank you for the opportunity of answering your questions. I am ready and willing to cooperate in any avenue you request.

Very truly yours,

EDWARD H. BURGE,
Owner.

Parties booked here from 1968-72 by telephone company

1968:			
Jan. 10	20pp	May 4	15pp
Jan. 10	26pp	May 6	20pp
Jan. 19	29pp	May 9	22pp
Jan. 30	25pp	May 16	15pp
Jan. 31	30pp	May 18	11pp
Feb. 12	21pp	June 1	10pp
Feb. 12	50pp	June 15	15pp
Feb. 15	25pp	June 20	25pp
Apr. 1	56pp	July 9	25pp
May 25	55pp	July 9	25pp
June 13	30pp	July 10	25pp
June 26	35pp	Aug. 18	20pp
June 28	35pp	Sept. 8	50pp
July 23	20pp	Sept. 24	25pp
July 23	50pp	Sept. 28	20pp
July 23	50pp	Oct. 9	15pp
Sept. 11	50pp	Oct. 12	15pp
Sept. 30	30pp	Oct. 14	15pp
Oct. 22	40pp	Oct. 15	20pp
Oct. 22	22pp	Oct. 22	30pp
Oct. 29	60pp	Nov. 9	15pp
Nov. 5	20pp	Nov. 30	15pp
Nov. 5	30pp	1970:	
Nov. 6	30pp	Jan. 11	30pp
Nov. 15	14pp	Feb. 15	30pp
Dec. 2	20pp	Mar. 23	15pp
Dec. 11	50pp	June 2, 8 a.m.	30pp
Dec. 11	40pp	June 2, 7 p.m.	25pp
Dec. 24	25pp	June 8	30pp
1969:		June 14	25pp
Feb. 5, 1:30 p.m.	35pp	Oct. 17	30pp
Feb. 5, 6 p.m.	35pp	Oct. 18	30pp
Feb. 9	25pp	Oct. 19	30pp
Feb. 28	30pp	1971:	
Mar. 9	15pp	Jan. 14	30pp
Mar. 23	20pp	Feb. 9	24pp
Mar. 28	34pp	Apr. 8	30pp
Apr. 6	15pp	Apr. 8	30pp
Apr. 11	15pp	May 16	25pp
Apr. 17	15pp	1972:	
Apr. 20	15pp	Jan. 13	30pp
May 1	15pp	May 15	20pp

EXHIBIT 2b.—A.T. & T. Response to Tropicana Lodge statement

Pacific Telephone said its employees have and do patronize the Tropicana Lodge. The company said that just last week, for example, a luncheon meeting of some 30 employees being honored for long service with the company, was held there. A number of new hotels and motels in the area could account for any reduction in business the Tropicana has experienced, the company added.

The company added that there is no evidence to substantiate his rambling charges about discriminating against him in billing or service.

EXHIBIT 3.—*Letter From Edward Burge to PUC of the United States Requesting Relief From Paying Interface Tariff*

TROPICANA LODGE,
Fresno, Calif., January 4, 1974.

Re Case No. 9625

Mr. WILLIAM E. JOHNSON,
Secretary, Public Utilities Commission of the United States,
San Francisco, Calif.

DEAR MR. JOHNSON: My company is using a private telephone system which is connected to the Pacific Telephone public system by an interface device. I am paying a monthly rental charge of \$312.60 for this device. The public telephone company maintains this device is necessary to protect their equipment. Listed below is my position on this matter:

(a) The device is unnecessary for the operation of my private telephone equipment.

(b) The interface device is an actual and potential source of trouble for the manufacturers of my telephone equipment.

(c) The interface device is redundant and duplicates protective functions already incorporated into the equipment.

(d) When Pacific Telephone and Telegraph Company employs technically comparable or identical equipment no interface devices are required; this constitutes an inequitable practice.

(e) This equipment could be certified by a registered engineer as meeting standards assuring no harm to the public network.

In view of all the above I am requesting that I be relieved from paying the monthly interface tariffs.

Sincerely,

EDWARD BURGE,
President.

EXHIBIT 4.—*Memo From Mr. Quam to Mr. Howard Re P. T. & T. Tariff Violations (Tropicana Lodge, et al.)*

SCOTT-BUTTNER COMMUNICATIONS, INC.,
Oakland, Calif.

Memorandum To: Pat Howard.
From: Bob Quam.
Date: December 14, 1973.
Subject: P. T. & T. Tariff Violations.

TROPICANA LODGE

The Tropicana experienced a severe drop in P. T. & T. business upon installation of their private system. It was the main facility for meetings, etc.

Approximately one week later, I was at the Airport Marina Motel and Mr. Joe Sobel, who was the manager at that time, stopped by our table and said, "I understand you have completed the installation at the Tropicana," and I said, "Yes we have." He said, "I know, I received a call from P. T. & T. and they said we would be receiving all of the P. T. & T. business since the Tropicana Lodge put in a private system.

DAVID & SONS

After David & Sons advised the Telephone Company they were going to use the TR/32, Gene Pelletier asked John Fritz if he could show John their new Electronic Pulse System. John said fine. When Pelletier met with John, he presented the Northern Electric Pulse System and told John it would do everything that the TR/32 did. John Fritz was not taken in. The violations were offering non-tariffed items and misrepresentation by saying the Pulse System has all of the features of the TR/32.

J. MITCHELL EMPLOYMENT SERVICE

Jayne Mitchell was moving into a new office facility and called the Telephone Company and requested a representative come out to make arrangements for the move. The Telephone Company refused to come out and said they could

handle it over the phone. She said no, she wanted to see a representative. They refused again and quoted her prices over the phone.

At that time, one of her employee's advised her of our services, so she called. We met with her and made arrangements for a small system. When the Telephone Company received the letter of agency, Gene Pelletier called and requested a meeting. They met with her and convinced her to break her order to us even though they were aware she had signed a contract and given us a deposit.

CONTINENTAL TITLE

We received the signed contract, deposit check, and letter of agency from Mr. Lee Newhaus. When the Telephone Company received the letter of agency, they called him and requested to meet with him. He called us and we had a joint meeting with Mr. Newhaus, Gene Pelletier and John Brock of P. T. & T., and Dick Dillon & myself. During that meeting, they implied we misrepresented the true cost of our service, that P. T. & T. would up-date their existing 756/4A to give them all of the features available on the Plessey 805, and asked Mr. Newhaus to withhold final decision for a few months so they could present one of their new electronics systems.

DAIRYMAN'S COOPERATIVE CREAMERY ASSOCIATION

You have Dick's report on Dairyman's.

BOB QUAM.

EXHIBIT 5.—*Letter From Mr. Brown to FCC Re Troubles With Nevada Bell*

ADVANCED INVESTMENT MANAGEMENT,
August 28, 1973.

FEDERAL COMMUNICATIONS COMMISSION,
Common Carrier Bureau,
Washington, D.C.

(Att: Mr. Kelly Griffith)

GENTLEMEN: When I called you yesterday I was outraged by Nevada Bell's letter of August 23rd. Of interest, however, are also their letters of January 9, 1973, and December 7, 1972, and the following:

The equipment in question is the Dictaphone "Ansafone 540" which is—as I understand it—equal in all respects and made by the same manufacturer as the "Code-a-phone 360".

When we were setting up the office in September 1972 Nevada Bell's marketing man's attitude was that I shouldn't own equipment. I was told pointedly several times that they lease such equipment and that it is "more trouble free". My response was that I'm not about to throw out what I already paid for—and that I had a right to own rather than lease. I was then informed: "You'll pay us one way or another—you'll need couplers" . . . I asked them to double check, since I was told that there was a Court ruling and an FCC letter asking companies not to require couplers in instances where the same equipment would be installed by the company without one.

Shortly thereafter an installer showed up. I asked him how soon I'll be able to use the unit again—and he said, "I don't know. After I install the coupler you'll need a special gadget to connect to it . . ." I told him, "do not put me out of business—you're here to *connect*, not to *disconnect*!" He telephoned someone, and left without installing anything.

The second installer came some two weeks later; I asked if he came to "connect or disconnect". He came to "put a beep device on" my unit. I asked him to check with his superiors, he did, took the beepers and left. Mr. H. Devaney's letter of December 7, 1972 followed.

I asked for an immediate meeting with Mr. Edwards (the General Manager). Met with him on December 14th. Bell acknowledged I'd not "cancelled" anything, and that there was no justification for that letter. I pointed out to Mr. Edwards that in addition to attempts to a) disconnect my device; b) interfere with my message via the beep tone; there was also; c) refusal to correct my address (only bills were sent to the proper address) and d) my inability to get Nevada Bell's information service to admit my business existed.

I stated that this amounted—from my viewpoint—to deliberate harassment, and that I wanted it stopped. Mr. Edwards assured me that I'll never hear

from Devaney again, and that proper couplers will be installed without disruption.

Next came the January 9th letter (still to the wrong address—it took a threat of court action to get the address and information connected months later). I heard nothing further until the letter of August 23rd.

Neither letter states that a procurement by me of the "15 prong" connector cable is the *only requirement* for putting this matter to rest.

Indeed, requiring a 15 prong exotic connection for a 2 wire device is either technical overkill or deliberate harassment—both designed to circumvent court decisions. *This equipment has been connected on two wires* for more than eleven months, and clearly needs no "15 prong" cable. Neither has it caused interference, nor produced danger for personnel . . .

I firmly believe now that this company has been and is using its monopoly position to harass into surrender anyone who dares to buy—rather than *lease their equipment*—and I formally request that you protect me (and others) from such brazen abuse of their power.

Very truly yours,

LAWRENCE G. BROWN,
Principal.

EXHIBIT 6.—*Letter from Mr. Corry to Mr. Hoverstock Re Purchase of Internal Wiring*

MAY 11, 1971.

Re International Travel Agency, Inc.,
3412 Audubon, 526-5555,
Section 214(a) of the Communications Act.

Mr. N. K. HOVERSTOCK,
General Manager
Southwestern Bell Telephone Co.
Houston, Tex.

DEAR MR. HOVERSTOCK: On March 19, 1971 we requested the price for purchase of the internal telephone wiring at the above address.

On April 23, 1971 we were informed by your Mr. Rudy Eddins that you would not sell the internal telephone wiring.

In our opinion, telephone companies have at best a revocable license to use the customer's premises for such internal wiring as may be needed to provide service to the customer. That license may be revoked when the customer chooses to terminate his use of Bell-provided equipment and to provide his own. When a customer decides to switch from Bell equipment to his own equipment, he can require Bell to remove all of its equipment *and wiring*.

The expense of removing internal wiring, which frequently is between walls and under carpeting, and of restoring the premises to their original condition after removing such wiring, can be quite expensive. In almost all cases, the salvage value of that wiring will be negligible. Thus, upon termination by the customer of Bell-provided service, Bell may be faced with a substantial net expense. If the customer purchases the internal wiring, however, Bell not only is spared the expense of removing its wiring, but is offered an opportunity to realize compensation for the wiring.

Since the Commission exercises jurisdiction over the interstate rates of the Bell system, that jurisdiction extends to consideration of unnecessary expenses which may be absorbed by Bell companies and unreasonably passed on to users of interstate toll service. Additionally, the disposition of internal wiring upon termination by a customer of Bell-provided equipment used in connection with interstate service is a practice in connection with interstate communication by wire and is therefore covered by Section 201(b) of the Communications Act. It is particularly so if the carrier's practice is designed in part to restrict the customer's freedom to substitute his own equipment for that of the telephone company. Cf. *Carterfone*. Pursuant to Section 205(a), the Commission can order the Bell companies to follow a reasonable practice in connection with interstate service.

The Bell companies, and therefore their subscribers, will be injured by the unreasonable absorption of the expense of removing internal wiring. The only possible benefit to the Bell companies of such a practice would be the anti-competitive effect upon independent suppliers of equipment, a benefit which is obviously contrary to the antitrust laws. The Commission can thus insist that Bell not absorb this expense if a reasonable alternative is available.

If Bell absolutely refused to sell its wiring no matter what price were offered, its absorption of the expense of removing the wiring would clearly be unreasonable. No distinction should be drawn between an outright refusal to sell and a willingness to sell only at an unreasonably high price. Thus, in considering the manner in which Bell disposes of internal wiring, the Commission can and should require that Bell offer to sell this wire at a reasonable price. Only if such wiring is offered to the customer at a reasonable price can Bell justify absorbing the cost of removing the wiring if it is not purchased.

The question, therefore, is whether Bell's policy for pricing internal wiring is reasonable. The asking price for such facilities should be determined in accordance with structural value. This would ordinarily be reproduction cost new, determined or estimated on the basis of equipment, material, and installation costs, less the allowance for the physical and functional depreciation which may have occurred in the plant offered for sale.

Arcata has no quarrel with the concept of "structural value," provided all factors affecting value are included. We object to the Bell pricing policy because it fails to include as a factor the value to the telephone company of saving and expense of removing that internal wiring which the customer offers to buy.

In most cases, the cost of removing the wire (less salvage value) will be equal to or greater than the cost of installing such wire. Allowing these costs to cancel each other would therefore be beneficial to Bell.

If the wiring is usable at all, the deduction for "functional depreciation" would be a negligible item in any event, and thus as a practical matter, the only factor left is the readily ascertainable replacement value of the wire, new. We suggest this value as the reasonable price for the transfer of existing internal wiring.

This is to request for the second time the price for the internal telephone wiring at the above job site and confirm our intentions to purchase same.

Very truly yours,

ARCATA Communications, Inc.,
JAMES R. CORRY.

Enclosures.

SOUTHWESTERN BELL TELEPHONE Co.,
Houston, Tex., May 17, 1971.

Mr. JAMES R. CORRY,
ARCATA Communications, Inc.,
Houston, Tex.

DEAR MR. CORRY: In reference to your letter of May 11, 1971, and after due consideration, our position remains the same. We do not elect to sell our inside wiring to provide service to International Travel Agency.

Thank you for your interest in this regard.

Sincerely,

N. K. HOVERSTOCK.

SOUTHERN BELL TELEPHONE Co.,
April 23, 1971.

Mr. E. STARN:
Arcata Communications, Inc.,
Houston, Tex.

DEAR MR. STARN: Per your request, this confirms our conversation of 4-20-71. Our Engineers made the decision not to sell our inside cable at International Travel Agency.

Sincerely,

RUBY EDDINS,
Communications Representative.

EXHIBIT 7.—Letter From Western Machinery Co. to Arcata Communications
Re Trouble With Mountain Bell Since Discontinuing Service

OCTOBER 4, 1971.

ARCATA COMMUNICATIONS,
Phoenix, Ariz.

(Attention: Mr. C. Ellis Edenfield)

DEAR MR. EDENFIELD: We today received a letter from Mountain Bell per copy attached. We also received our monthly invoice from Mountain Bell which

looks like they have mixed up in such a way it is going to very difficult to check out the long distance phone calls. This has never been done in the past. It has always been neat and in order. Are we to expect that Mountain Bell is taking "revenge" for our discontinuing their service? If this is the case, we ask that we possibly get together again before we proceed any further with the Arcata System.

Yours very truly,

WESTERN MACHINERY Co.

EXHIBIT 8.—*Gulf-States Telephone Co. Letters Re Southern Bell Attempts to Solicit Gulf-States Customers*

GULF-STATES TELEPHONE Co.,
Pensacola, Fla., May 23, 1972.

Mr. W. "BOB" ROBERTS,
President,
Gulf-States Telephone Co.,
Mobile, Ala.

DEAR MR. ROBERTS: On May 18, 1972, I delivered a letter to Mr. W. S. Turner, District Marketing Manager for Southern Bell Telephone Co. at Pensacola, Florida. That letter was signed by Mr. Harry W. Thompson, President of Thrifty Traveler, Inc. and advised the telephone company that he had signed a contract with our company to install a PABX System in his new motel.

On May 19, 1972, Carl Bonner, a Southern Bell Communication Consultant, visited Mr. Thompson and tried to convince him to cancel the contract that he had signed with our company. At this time it is difficult to evaluate the damage that our company has suffered from Mr. Bonner's actions.

In addition to the above, on May 19, 1972 I also delivered a letter to Mr. Turner from Hector Manufacturing & Supply Co. That letter advised that R. M. Brown of Gulf-States Telephone Co. had been appointed as their Communications Consultant and that all telephone service requirements should be handled direct with Mr. Brown until notified otherwise.

On May 22, 1972, Mr. Windham, President of Hector Manufacturing & Supply Co., was contacted by Bill Farris, Communication Consultant for Southern Bell. Mr. Farris advised him that he would see Mr. Windham on May 23, 1972, to discuss the telephone system that Mr. Windham was purchasing from Gulf-States Telephone Co. He stated that Southern Bell "had something better to offer".

Assessment of actual damages in this case is also difficult to evaluate at this point. I will follow both cases closely and keep you advised of developments.

As you know, these actions by Southern Bell are in direct violation of their own Company policy as set forth in a letter from Mr. Stan Damkroger, Assistant Vice President, Marketing, A. T. and T. Co., dated June 25, 1971. That letter was transmitted to Mr. Turner by Mr. J. L. Knight, General Sales Manager, North Florida Area, Southern Bell Telephone Co., on July 27, 1971.

Due to the nature of Southern Bell's activities and the potential damages to our company's legal position in the market, I suggest that we initiate the strongest possible actions to eliminate these problems in the future.

Yours very truly,

ROBERT M. BROWN,
Vice President.

GULF-STATES TELEPHONE Co.,
Mobile, Ala., May 25, 1972.

Mr. L. E. RAST,
President, Southern Bell Telephone & Telegraph Co.,
Atlanta, Ga.

DEAR MR. RAST: I wish to bring to your attention facts which I feel are of vital concern to Southern Bell Telephone & Telegraph Company.

Attached please find two signed statements which I have received today from two of our executives in the Florida Panhandle area. These statements indicate unethical and illegal attempts to restrain competition by your people in the Pensacola and Panama City, Florida areas.

As your firm is the public utility in the areas in question and our firm is forced to bring to your firm (our competitor), privileged information relative

to line service, interface and interconnection arrangements, we feel a great sense of injustice when the privileged information which is delivered to the public utility aspect of your business is used immediately and illegally to compete against our firm.

I believe you will find the enclosed statements self-explanatory. I am today directing extensive correspondence to the Acting Attorney General, Antitrust Division of the Department of Justice, Washington, D.C., requesting that immediate action be brought against Southern Bell for restraint of trade and continuing violations of Antitrust laws.

I am directing also to Mr. John deButts, President of AT&T, the same sets of facts I am providing you at this point. If the pattern of activity we are experiencing in dealing with your people in Panama City and Pensacola is in keeping with the policy of Southern Bell or AT&T we would certainly appreciate a reply indicating this fact.

I met personally with Mr. W. S. Turner, District Marketing Manager for Southern Bell in Pensacola and he stated to me that he was following policy directives "to the letter" and that we could expect continuing attempts to "unhook" our customers by Southern Bell Marketing people.

Our attorneys have advised us to take strong decisive action immediately in order to protect our firm's right to compete fairly in the Florida Panhandle area. I will meet with them again in the next few days to hear their further recommendations regarding possible litigation against Southern Bell.

At this point, two of the three customers involved in this specific case, have indicated to us that they have no intention of changing their decisions because of the tactics employed by Southern Bell. One customer has now indicated confusion because of questions raised by Southern Bell's tactics and has delayed contract finalization with us until Friday.

I can assure you that we will seek legal damages in the courts for a substantial sum in the event this customer elects to cancel his verbal commitment to us as a result of your firm's tactics.

Very truly yours,

W. "BOB" ROBERTS,
President.

EXHIBIT 9.—*Letter From Gulf-States Telephone Co. to A.T. & T. Re A.T. & T. Position on Organized Boycotts of Companies Using Non-Bell Equipment*

OCTOBER, 25, 1972.

MR. JOHN D. DEBUTTS,
President,
American Telephone & Telegraph Corp. (AT&T),
New York, N.Y.

DEAR MR. DEBUTTS: I wish to bring to your attention today, a matter which I feel is of a most serious nature.

Earlier today, a customer of our company in Columbus, Georgia was contacted by a Southern Bell employee and told that effective today, all Southern Bell employees would affect a boycott of three automobile dealers in the Columbus area that had purchased privately-owned ITT telephone systems from our firm. The Southern Bell employee further stated that this boycott on the part of Southern Bell employees would be extended to cover any company in the Columbus area that elected to deal with Gulf-States Telephone Company instead of Southern Bell. The employee also stated that this boycott was placed into effect today, under a management directive issued by top management in Southern Bell's Columbus, Georgia office.

I would like to know what AT&T's position is on organized boycotts of company's using non-Bell equipment: whether you endorse this policy or not. It not, what action you plan to take in the above described situation.

I would certainly appreciate a reply at your earliest convenience.

Sincerely yours,

GULF-STATES TELEPHONE CO.
W. "BOB" ROBERTS,
President.

EXHIBIT 10.—*Illinois Bell Memo Re Company Policy Regarding Employees Engaged in Assisting Competing Firms*

ILLINOIS BELL,
Chicago, Ill., March 1971.

TO ALL ILLINOIS BELL TELEPHONE PEOPLE

Your future and mine are closely tied to Illinois Bell's fortunes. Every sale we make adds revenues especially needed in today's economic climate. This provides the base on which we can prosper as a company and as an individual. Every sale we lose, on the other hand, affects us all unfavorably, the unions with which we have contracts, our fellow employees, our share owners, and our customers. Since your family, too, has a stake in the company's future, I'm writing you at home.

We always have had competition, especially in business services. Today, because of regulatory decisions, competition is greater than ever. Others are now free to sell communications equipment, including switchboards, and with certain restrictions connect it to our network. They can establish communications systems for our customers which carry messages, data and other types of signals. These developments are new, and cannot help but have some effect on our business.

We know we can compete successfully. We are doing so. We believe we have the superior know-how, best equipment and most reliable service to cope with any competitive challenge. But we must sell hard and serve better, and all our efforts must be directed at furthering the company's interests. If you hear of a customer being approached by a competitor, you can help our sales effort by letting your supervisor know about it.

A few firms have approached telephone people and have asked them to use their Bell System-acquired knowledge, training and experience to connect and maintain their competitive equipment. Some of these firms have attempted subterfuge and bribery for these skills, as well as to obtain company records they feel will be useful to them. I'm sorry to say that a few of our employees have accepted these offers.

Telephone people who assist competitors are acting unethically, perhaps unknowingly. Such acts are definite conflicts of interest. To accept wages and benefits from Illinois Bell and at the same time receive payment from those who are competing against us can only hurt us all.

Thus, we have established the following policy:

Any employee engaging in activities to promote or assist in the sale, maintenance, repair, design, construction or installation of communications equipment or systems competitive with services provided by Illinois Bell will be subject to immediate suspension and possible dismissal. Further, Illinois Bell will initiate appropriate legal proceedings against such individual whenever circumstances warrant.

It is only fair to make the company's position clear on this question, should you be approached by a competing firm. Each of us must guard against even accidentally disclosing any information which will help competing organizations. Should anybody outside the company ask you for such information, I urge you to report it to your supervisor immediately.

J. B. GABLE.

EXHIBIT 11.—*Southwestern Bell Letter to Employees Re Company Policy Regarding Competing Firms*

SOUTHWESTERN BELL,
St. Louis, Mo., September 11, 1972.

DEAR FELLOW EMPLOYEES: As you know, Southwestern Bell is facing ever-increasing competition for communications business. And with this competition, come new challenges which affect not only the company, but each of us individually.

There already is a wide array of communications equipment that competing firms now sell and interconnect with the Bell System network. Moreover, regu-

latory decisions also have opened the way for competing communications systems to set up and carry messages, data and other types of signals for customers.

While these developments cannot help but affect our business, I am proud to see we are meeting this competition successfully.

There is growing concern, however, for yet another competitive challenge—one you may not have heard about.

A few competing firms have asked Bell people to use their knowledge, training and experience off-hours to connect and maintain competitive equipment.

Telephone people who assist competitors are acting unethically. Such acts are conflicts of interest. To accept wages and benefits from Southwestern Bell and at the same time receive payment from our competitors, can only hurt us all.

It is only fair to make our company's position clear on this question, should you be approached by a competing firm:

Any employee engaging in activities to promote or assist in the sale, planning, purchase, construction, installation or maintenance of communications equipment or systems competitive with services provided by Southwestern Bell will be subject to discipline, which may include dismissal for misconduct. Furthermore, Southwestern Bell may initiate appropriate legal proceedings against such individual whenever circumstances warrant.

The wording is concise and to the point. Furthermore, should anyone outside the company request information or assistance such as that outlined in the above statement, I urge you to report it to your supervisor. It is up to each of us to guard against even accidental disclosure of such information which would help a competing company.

Throughout our history, telephone people have earned a high reputation for integrity. If put to the test, I am confident our conduct will continue to reflect the high ethical standards that are so vital to our business.

Sincerely,

A. S. ALSTON,
President.

THE INDUSTRIAL REORGANIZATION ACT (S. 1167)

(The Communications Industry)

FRIDAY, JUNE 21, 1974

U.S. SENATE,
SUBCOMMITTEE ON THE ANTITRUST AND MONOPOLY
OF THE COMMITTEE ON THE JUDICIARY,
Washington, D.C.

The subcommittee met at 9:35 a.m., in room 2228, Dirksen Senate Office Building, Hon. Philip A. Hart (chairman of the subcommittee) presiding.

Present: Senators Hart and Hruska.

Staff present: Howard E. O'Leary, Jr., chief counsel; Gerald Hellerman, special financial adviser; Janice Williams, chief clerk; Peter N. Chumbris, minority chief counsel; and Charles E. Kern II, minority counsel.

Senator HART. The committee will be in order.

We will call as our first witness this morning, Mr. Massick.

Mr. Massick speaks as president of the Truckweld Equipment Co.

Mr. Massick, we welcome you.

STATEMENT OF JAMES W. MASSICK, PRESIDENT, TRUCKWELD EQUIPMENT CO., SEATTLE, WASH.

Mr. MASSICK. Thank you, Senator.

Pursuant to the request by the Senate subcommittee, I herewith tender the following statement concerning the transactions of Truckweld Equipment Co. with Pacific Northwest Bell Telephone Co. during 1972.

Truckweld Equipment Co. located at 739 9th Avenue North, Seattle, Wash. 98109, had a communications system consisting of about 40 phones rented from Pacific Northwest Bell Telephone Co. at a total cost, including lines, of approximately \$255 per month. Also, Truckweld Equipment Co. for 7 years had a Terry phone system, which is essentially an inner-company intercom between the sales department, shop, office, and manufacturing plant at a cost of \$220 per month. The two communications systems were independent of each other, which necessitated handling two phones if there was an incoming call and a person wanted to call within the company in order to talk to somebody concerning the incoming call.

Arcata Communications Co. sent a letter to Truckweld Equipment Co. on approximately December 8, 1971, which was generally in the nature of a sales letter, indicating their willingness to analyze the present communications system of Truckweld Equipment Co. Pursuant to the letter of Arcata, a sales representative from Arcata did visit Truckweld Equipment Co. and offer on approximately December 13, 1971, to plan a detailed communications system for Truckweld Equipment Co.

A written proposal from Arcata was sent to Truckweld Equipment Co. on approximately December 27, 1971. In order to completely analyze the existing communications system, Arcata had to obtain the frequency of incoming calls; and in order to do so, it had to obtain permission from Pacific Northwest Bell.

As soon as Arcata made inquiry to obtain permission from Pacific Northwest Bell for the history of the frequency of the calls, a communications consultant from Pacific Northwest Bell sought an interview with Truckweld Equipment Co. for the purpose of making a counterproposal.

In fact, in March 1972, Pacific Northwest Bell Telephone did present its analysis and recommendations for a complete communications system. However, the proposal submitted by Pacific Northwest Bell for the communications system was at greater cost than Arcata's proposed changes and Pacific Northwest Bell couldn't combine the two present telephone systems into one, as could Arcata.

It was thus concluded by management of Truckweld Equipment Co. that Arcata's system was better operationally and financially for Truckweld; and in May 1972 it was decided by the management of Truckweld Equipment Co. to install the proposed Arcata system, which was completed in June 1972.

Virtually the same day that the Arcata communications system was installed, Pacific Northwest Bell Telephone ceased having Truckweld Equipment Co. work on their equipment, and purchase new equipment from Truckweld. Truckweld Equipment Co. since 1956 has sold new equipment to the Bell System, and had over the years done a substantial amount of shopwork on the truck equipment of Pacific Northwest Bell Telephone.

On practically the same day that the Arcata communications system was completed in June 1972 Pacific Northwest Bell Telephone removed all of the equipment that it had being repaired in the shop of Truckweld Equipment Co. In fact, there was a piece of equipment in process in Truckweld belonging to Pacific Northwest Bell that was partially completed, and that was taken out of the shop of Truckweld Equipment Co. with the work not completed on the day that the Arcata communications system was finally installed. In response to why the Pacific Northwest Bell Telephone equipment was being taken so abruptly out of the shop of Truckweld, an employee of Pacific Northwest Bell Telephone stated that, "Since you people are no longer going to buy telephone service from us, we are going to take the equipment out of your shop."

Since June of 1972 there have been no purchases of equipment by Pacific Northwest Bell Telephone from Truckweld Equipment Co. and there have been no repairs in the shop of Truckweld Equipment Co. on the equipment belonging to Pacific Northwest Bell. Pacific

Northwest Bell has purchased replacement parts for equipment previously sold by Truckweld Equipment Co. to Bell.

The following table shows the sales by Truckweld Equipment Co. of merchandise to Pacific Northwest Bell Telephone from 1969 through 1972, which comprised new equipment, repairs, and maintenance in the shop, plus replacement parts.

	1969	1970	1971	1972'
January.....	4.03	91.07	221.93	255.82
February.....	385.70	827.50	5,782.94	9.92
March.....	415.01	26,807.49	799.07	2,268.25
April.....	1,464.39	3,812.05	627.71	1,078.68
May.....	54.97	3,409.19	2,154.49	1,442.52
June.....	643.26	4,634.72	492.72	3,722.36
July.....		14,825.14	1,576.37	869.42
August.....	133.49	1,462.65	781.74	
September.....	127.54	1,953.11	2,151.21	
October.....	613.22	11,763.02	19,270.50	
November.....	11,498.40	514.80	3,644.54	
December.....	7,129.77	825.43	1,643.24	
Total.....	22,519.78	70,926.17	39,146.46	9,646.97

Mr. MASSICK. In summary, in 1969 we sold approximately \$22,500 worth of merchandise.

In 1970, we sold \$70,900.

In 1971, we sold \$39,146.

And in the first 6 months of 1972, we sold \$9,600.

The following is a table showing the sales by Truckweld Equipment Co. to Pacific Northwest Bell since June 1972, which comprised only replacement parts and a previously leased item of equipment being sold to Pacific Northwest Bell Telephone.

1972:

August.....	\$2,312.00
September.....	893.60
October.....	2,333.86
November.....	1,022.21
December.....	893.71
Total.....	<u>7,445.38</u>

1973:

January.....	1,355.17
February.....	875.20
March.....	6,806.82
April.....	6.71
May.....	40.01
June.....	101.28
July.....	1,502.28
August.....	17.33
September.....	153.40
October.....	995.45
November.....	
December.....	
	<u>11,853.65</u>

Mr. MASSICK. In the last 6 months of 1972 we sold approximately \$6,000.

The fact of the matter is Pacific Northwest Bell Telephone has suffered an approximate loss of \$34 per month because of the switch-over to Arcata communications system.

The monthly billing from Pacific Northwest Bell Telephone to Truckweld Equipment Co. for the phone lines, excluding all long distance calls, runs approximately \$285 per month.

I might add our long distance calls range between \$1,200 and \$1,300 a month.

Because of Arcata's one communication system, the Terry phone system was able to be eliminated with an approximate saving of about \$220 per month.

Senator HART. How often were you visited by Northwest people before your company began to consider the purchase of its own telephone system?

Mr. MASSICK. We were never contacted—if I understand your question.

Senator HART. I am really trying to find out what kind of attention was paid to you before.

Mr. MASSICK. By Pacific Northwest Bell's so-called communications consultant?

Senator HART. Yes.

Mr. MASSICK. We never saw the individual until this matter came up. We were visited quite regularly during the appraisal of the two systems; and once the matter had been decided, we have not seen the individual for the last 2 years.

He was there only during the period of equipment evaluation.

I might also add that the Arcata representative was in our plant on a continuing basis monitoring the system that they did install. We have been extremely pleased with what we have. To my knowledge, the Bell System is not yet as able to come up with a system comparable to the Arcata system.

I might expand somewhat on the overall relationship with the telephone company. Our company is basically a manufacturer and distributor of custom truck bodies. These range from dump trucks to fire engines to perhaps garbage trucks to aerial ladders, that type of thing.

Our total utility business represents less than a third of our overall volume. I might add that after reading the article in the newspaper last night, that our customers, as of today, include Seattle City Light, Tacoma City Light, Puget Sound Power & Light, the State of Washington, virtually every public utility district in Washington, the State of Alaska, and the cities of Anchorage and Fairbanks, Alaska.

A large majority of the still privately owned telephone systems within the State of Washington also are included.

Pacific Northwest Bell's overall volume with us is less than 1 per cent of our total business.

We have had very, very little to do with the Bell telephone system per se in the last 2½ years.

Senator HART. Mr. O'Leary?

Mr. O'LEARY. Mr. Massick, at the bottom of page 3 of your statement, you indicate that the telephone company now purchases replacement parts from you.

Mr. MASSICK. That's correct.

Mr. O'LEARY. Are these parts available elsewhere, or readily available elsewhere?

Mr. MASSICK. No, they are not. They are parts by and large for aerial equipment that we distribute; and there is one distributor in a given area, such as Washington, or Oregon, the State of Alaska.

Mr. O'LEARY. It appears in March of 1973 you did \$6,606 worth of business with Pacific Bell?

Mr. MASSICK. Yes. That was the sale of a leased item of equipment to them that they wished to exercise.

Mr. O'LEARY. Can you enlarge on that?

Mr. MASSICK. Yes. We had manufactured and leased to them a large trailer that we called a reel trailer to haul reels of underground cable. That item had been on lease and they wished to exercise the purchase option, and did so.

Mr. O'LEARY. That equipment had been previously leased to Pacific Northwest Bell prior to you putting in your own telephone equipment?

Mr. MASSICK. Yes.

Mr. O'LEARY. With respect to your telephone system that you now have, are you satisfied with the equipment in service?

Mr. MASSICK. Absolutely. Extremely so.

Mr. O'LEARY. What, if anything, can you tell us about its flexibility?

Mr. MASSICK. The one instrument that we have has six incoming telephone lines, plus two internal communication lines, and two internal page lines.

In other words, I can receive an incoming call, have a question for an individual in the plant, page him, have him answer me on a private internal communication line, satisfy any question that I might have, and then go back to the incoming call, all in the same instrument.

Mr. O'LEARY. I take it that you prefer this equipment to what which the telephone company was capable of providing?

Mr. MASSICK. Absolutely.

Mr. O'LEARY. With respect to your own telephone service; have you been able to get satisfactory service and maintenance?

Mr. MASSICK. Yes, I have.

The system itself is maintained by the Arcata Communication Co. whenever there is a problem with it. The maintenance has just been outstanding.

Mr. O'LEARY. I have no further questions, Mr. Chairman.

Senator HRUSKA [presiding]. Mr. Chumbris?

Mr. CHUMBRIS. Mr. Chairman, may I ask for the record that a press release that was issued yesterday by A.T. & T., which was reported partly in the Washington Post this morning, be made part of this record as a policy of the corporation?

Senator HRUSKA. In this regard?

Mr. CHUMBRIS. Yes.

Senator HRUSKA. Very well. Without objection it will be in the record.

Senator HRUSKA. There being no further questions, we thank you for appearing.

Mr. MASSICK. Thank you.

[The following was received for the record:]

MATERIAL RELATING TO THE TESTIMONY OF MR. MASSICK

EXHIBIT 1.—*Release of A.T. & T. Re Testimony of Mr. Massick*

Pacific Northwest Bell said that there's been no change in the company's business relationship with the Truckweld Equipment Company. The company has—and does—consider Truckweld a source of supply for certain products and services. It said that the amount of supplies purchased from Truckweld in the past two years has dropped for two reasons: a downturn in a number of business factors that caused a cutback in expenditures (for example, in the summer of '72 when Pacific Northwest Bell started reducing expenditures at Truckweld, it also released some 600 employees); and Truckweld's loss of three franchises that cover equipment Pacific Northwest Bell would normally consider and use.

Senator HRUSKA. Our next witness is Mr. Thrun of Thrun Chevrolet.

Mr. Thrun, you have submitted a statement to the committee. You may proceed with it.

STATEMENT OF WOLFGANG M. THRUN, PRESIDENT, THRUN CHEVROLET, INC., DES MOINES, IOWA

Mr. THRUN. Gentlemen, on or about the 10th of October 1973 I got in touch with Northwestern Bell in Des Moines, Iowa, in regard to a new phone system, as our present system was inadequate. Two gentlemen from Northwestern Bell came to my dealership, one of whom was Daryl Petersen, communications representative in the marketing department.

I inquired about the system "300," since I was familiar with it. Northwestern Bell studied our operation for our needs, some engineers checked locations for the equipment, and a proposal was made. Northwestern Bell decided that the "200" system was adequate for our present and future needs.

We decided to enter into a written and signed contract with Northwestern Bell, a copy of which is enclosed.

[See exhibit 1 at the end of Mr. Thrun's oral testimony.]

Mr. THRUN. About 4 or 5 days after the order and contract was signed with Northwestern Bell, Mr. Petersen and another representative came to see me. They told me that they had some good news and some bad news. I was informed the good news was that the system could be installed about 30 to 45 days sooner than originally thought. The bad news was that the installation charges would be \$2,800 instead of \$510 and the monthly charge would be about \$874 a month instead of \$635. My reaction to this was very negative.

I asked about the contract that we had signed and I was told that Northwestern Bell would naturally release me from it. My comment was that I would rather have them comply with it. But this they could not do. Before they left I told them that I was aware of other systems on the market and I would check into it. They seemed to be relieved as to the outcome of our conversation. After they were gone I called my attorney, Robert Dreher, told him the story and asked him to get me released from my contract with Northwestern Bell. He

felt this would not be a problem since we knew the legal counsel of Northwestern Bell.

From this point I started negotiations with Sound, Inc., whose representative is Joe Emmerson. I found out that I could lease-purchase a better and more versatile system for less expense from Sound, Inc. In the meantime, I was called upon by Northwestern Bell in a number of meetings with different people, one of whom was Mr. W. R. Vogel. The following proposals for the "200" system were made to me:

- (1) To help me, Northwestern Bell would spread the installation cost over a 12-month period;
- (2) Northwestern Bell was working on a new billing system over a longer period of time, like a falling curve;
- (3) Price reductions were offered; and
- (4) Assignment of special repairmen to our account.

In the meantime, my attorney informed me that he had obtained a signed release from Northwestern Bell on the original contract.

The next stand Mr. Vogel took was that Northwestern Bell would hold me to my original contract. I informed Mr. Vogel that I had a release from it, and he was very surprised since he was not aware of it.

Northwestern Bell's next proposal was to install a Sound, Inc., system for less money, approximately \$12 less a month than Sound, Inc.'s proposal. At this time I told Mr. Vogel that my credibility in Northwestern Bell was shot, and I would use smoke signals before I would do business with Northwestern Bell.

He said he was surprised at my thinking, since he was sure that all car dealers were "wheelers and dealers." I told him the dealings are over with a signed contract. He said he was sorry, but Northwestern Bell could not afford to have me like the new system, "Sound," because other dealers might change their systems also.

During this period Northwestern Bell had bid requests for approximately 100 new vehicles. Because of all this going on, we did not bid on their bid request.

On the day of the opening of the bids, my new car manager was called by Northwestern Bell and told we were given 24 more hours if we wanted to submit a bid on the vehicles. We declined the offer.

From December 1973 to about the middle of February 1974 my managers informed me that some of our customers who worked for Northwestern Bell were told by Telco Credit Union to buy cars from dealers that had Northwestern Bell equipment. Since about the middle of February we have had no more of it and have begun to do some business with Northwestern Bell.

Recently, Iowa Public Relations Director Ray Peterson bought a new car from us. He gave his business card to the salesman with the request that I be informed of the purchase, and to tell me that Northwestern Bell had really mishandled Thrun Chevrolet.

Senator HART. I think counsel wants to put into the record, if there are no objections, several documents.

Mr. HELLERMAN. Thank you. I would like to introduce into the record approximately 40 folders of information filed by various parties. These folders contain numerous documents, some from customers of different interconnect sales companies.

Senator HART. They will be received.

[The documents appear as exhibit 2 at the end of Mr. Thrun's oral testimony.]

Mr. CHUMBRIS. Mr. Chairman, in receiving those documents, since they are rather voluminous and since there will be some time before the company will be able to respond because they are not appearing until the 9th of July and I believe the 30th of July—do we have copies so they can be made available to the parties who are being charged with these things so they will have plenty of opportunity to look at them and make whatever response that is necessary for the record?

Senator HART. Copies will be made available promptly.

You may proceed with your questions.

Mr. HELLERMAN. Mr. Thrun, toward the bottom of the first page of your statement you mention you were called upon by Northwestern Bell a number of times. Did you invite them?

Mr. THRUN. No, sir. As a matter of fact they came in any time they wanted to. If I didn't have time, they left and just chose their opportunities whenever they could talk with me.

Mr. HELLERMAN. How many visits did you receive from Northwestern Bell personnel after they found out you were considering acquiring your own telephone equipment?

Mr. THRUN. About seven or eight.

Mr. HELLERMAN. How often did they visit you after they found out you were going to buy your own equipment?

Mr. THRUN. Never.

Mr. HELLERMAN. Would you comment on their approach or attitude?

Mr. THRUN. I had the feeling I was trying to be intimidated to use the system because by telling me that Northwestern Bell's customers would get better service in case of equipment failure, in this case, would only be the trunklines, but I didn't feel that in any which way could they conduct their business like I thought it should be conducted.

Mr. HELLERMAN. Did the same personnel show up each time or were there several different persons?

Mr. THRUN. There were others. Normally there was one gentleman from the previous meeting, and then his supervisor, somebody else, came with him. Sometimes three people saw me.

Mr. HELLERMAN. You indicate in your statement that Northwestern Bell proposed that they install the exact same equipment that you were going to purchase from Sound, Inc. Do you mean that Northwestern Bell was going to go out and buy the exact same equipment and then turn around and lease it to you?

Mr. THRUN. That is what I was told, yes.

Mr. HELLERMAN. Who told you that?

Mr. THRUN. Mr. Vogel.

Mr. HELLERMAN. Who is Mr. Vogel?

Mr. THRUN. He is the communications representative from the marketing department.

Wait. Also he is the supervisor of Mr. Petersen, Daryl Petersen.

Mr. HELLERMAN. In connection with the statement at the bottom of page 2 concerning the credit union, are you aware of an instance where a Northwestern Bell employee signed with you to purchase a car and then was refused financing by the credit union?

Mr. THRUN. That is true. That was only one instance. Des Moines is a small city, and the desire of our dealership is to try and do business with everybody. I have instructed my people, regardless of the phone company's feeling, we still would appreciate their business.

Also, they have run into a number of problems where people would tell them that—you know, we couldn't get the money borrowed if we buy the car from you. In some instances, we made provisions through banks and reloaned the money to the customers.

Mr. HELLERMAN. Mr. Chairman, I would like to introduce additional documents at this point in the record. One is a letter from the Internal Medical Clinic in Des Moines, Iowa, concerning the situation, at Northwestern Bell. In fact, in her letter Irene Spradling mentions Mr. Vogel particularly. [See exhibit 3.]

In addition, I would like to introduce union publications, one dated January 1973, volume 14, issue 1, published by Local 7400 of the Communications Workers of America, and another document of the Communication Workers Association meeting in October 1973. [See exhibits 4 and 5.]

Also, at this time, excerpts from contracts between Southern Bell Telephone Co. and Communication Workers of America, and the general agreement between Northwestern Bell Telephone and the Communications Workers of America where it is indicated that the Bell Telephone Co. has the ability to remove objectionable material from bulletin boards; and then pictures of a bulletin board down in the Texas area; and a transcript of a tape-recorded message, Communications Workers of America, Local 1170, January 9, 1974, indicating that the telephone workers should stop doing business with certain companies. [See exhibits 6 and 7.]

Mr. CHUMBRIS. May I make the same reservation?

Senator HART. Yes. With the assurance the documents will be made available promptly to the telephone company.

Mr. HELLERMAN. No further questions, Mr. Chairman.

Senator HART. Mr. Chumbris?

Mr. CHUMBRIS. Mr. Chairman, I have no questions.

Senator HART. I was away when you started and I read through your statement. I find it interesting. Could I ask for the record the volume of business you do in terms of new car units?

Mr. THRUN. We are selling approximately 14 or 15 new units and about 1,000 used units.

Senator HART. Thank you very much.

[The following was received for the record. Testimony resumes on p. 2974.]

MATERIAL RELATING TO THE TESTIMONY OF WOLFGANG M. THRUN

EXHIBIT 1.—*Copy of Contract Between Northwestern Bell Telephone Co. and Thrun Chevrolet*

NORTHWESTERN BELL TELEPHONE CO., TELEPHONE SERVICE CONTRACT

This Agreement, made this 16 day of October, 1973, between NORTHWESTERN BELL TELEPHONE COMPANY, hereinafter called the "Telephone Company," and Thrun Chevrolet, hereinafter called the "Subscriber."

It is agreed between the parties that:

1. The Telephone Company will furnish, install and maintain a Series 200 plus options, hereinafter called the "Service," at 623 E. Grand, in connection with exchange, toll and long distance service.

2. The Service will consist of that furnished by the equipment having the features listed in the schedule attached hereto. Said Service may be modified from time to time by the consent of the parties.

3. The Subscriber will pay the Telephone Company (a) monthly in advance for the Service furnished hereunder, and other exchange Telephone Service, at the rates lawfully in effect at the time such Service is furnished; (b) monthly for all long distance Service sent paid from or received collect; and (c) for any service connection, move, change or other non-recurring charges, at the rates lawfully in effect at the time such Service is furnished or work performed.

4. The initial term of this contract will be 3 years beginning with the commencement of the Service hereunder; thereafter, the contract will continue in effect until terminated by thirty days written notice by either party to the other. This contract may be terminated by the Subscriber prior to expiration of the initial term upon payment of any sums then due, including any unexpired minimum and basic termination liability charges applicable to the Service, as either initially or subsequently provided, pursuant to Telephone Company Tariffs.

5. The Telephone Company will immediately commence such engineering and other preparations as are required, and will attempt to furnish the Service commencing on March 5, 1974. The Subscriber agrees to receive and purchase the Service commencing on said date, or if not available then at such later date as the Telephone Company actually is ready to provide the Service. In the event the Telephone Company is unable for any reason to furnish the Service or a reasonably adequate part thereof within a reasonable time of the above date, the Telephone Company shall provide suitable alternative Telephone Service sufficient to meet the minimum telephone needs of the Subscriber until such time as the Service is available. Such alternative Telephone Service shall be furnished at the rates lawfully in effect at the time such Service is furnished.

6. It is understood that to provide the Service on the above date, the Telephone Company must incur considerable expense and make substantial investments well in advance of said date. Much of such expense and investment cannot be allocated to other Service in the event the Service hereunder is deferred or cancelled. Consequently, the Subscriber agrees to inform the Telephone Company as soon as possible of changes in its plans or circumstances that may require cancellation or deferral of the Service hereunder so that the Telephone Company may cancel or defer its preparations and otherwise minimize any loss. When a customer cancels or defers his order for service before the service is activated, a charge applies to allow the Telephone Company to: recover the non-recoverable costs of engineering, labor, material and equipment in case of cancellation or sustain an investment beyond a reasonable period in case of deferral.

Charges apply as follows:

A. Cancellations—the charge is equal to the non-recoverable costs incurred prior to the request for cancellation and the costs of removal, restoration and disposal, if any, to comply with cancellation. These costs include engineering, labor and non-recoverable material and equipment expense, among others. The maximum amount charged shall not exceed the total of all non-recurring, minimum monthly and termination charges which would have applied had the service as ordered been established.

B. Deferment of start of service:

If the request for deferment is received by the Telephone Company *prior* to the date an order for the equipment is placed with its supplier—no charge shall apply.

If the request for deferment is received by the Telephone Company *subsequent* to the date the order for the equipment was placed with its supplier:

(i) For deferments of up to ninety (90) days beyond the original agreed upon start service date—no charge shall apply.

(ii) For deferments extending beyond ninety (90) days, a monthly recurring charge based upon costs incurred prior to the request for deferment applies. This monthly charge equals the deferred investment times the prime interest rate plus recurring costs resulting directly from deferral, such as storage, taxes, etc. In addition, any extraordinary non-recurring costs resulting from the deferral, such as additional engineering and labor, or transportation, shall be billed in total. Billing shall start the beginning of the fourth month of deferment and extend to the start of service. Charges shall not exceed the monthly rate which would have applied had the service been established.

7. Any conduit and molding which must be placed upon the Subscriber's premises and grounds to carry Telephone Company cables and wiring used to serve the Subscriber will be provided, installed and maintained by the Subscriber.

8. All operating at the Subscriber's premises in connection with this service shall be performed by and at the expense of the Subscriber in a manner conforming with Telephone Company rules and regulations intended to maintain a proper standard of service and specifying the authorized use of each service furnished.

9. The Rules, Regulations and Tariffs of the Telephone Company as lawfully in effect during the period in which the Service is furnished, installed and maintained hereunder, are part of this contract and are binding on the parties as if fully set out herein.

NORTHWESTERN BELL TELEPHONE Co.,
By W. T. TODD, *District Sales Manager.*
THRUN CHEVROLET,
By WOLFGANG M. THRUN.

PRIVATE BRANCH EXCHANGE SCHEDULE TO TELEPHONE SERVICE CONTRACT

(Between Northwestern Bell Telephone Company and Thrun Chevrolet, dated October 16, 1973)

The following equipment features will be furnished, installed and maintained as part of said contract:

1. PBX Serving Equipment or PBX Series 200 plus options.
2. Number of Stations:
 - A. Main: On premise, 25; off premise 5.
 - B. Extension.
 - C. Restricted.
3. Number of Central Office Trunks:
 - A. Combination, 10.
 - B. Out Dial.
 - C. Incoming.
4. Attendant Positions:
 - A. Console: Type, universal; quantity, 1.
 - B. Switchboards.
5. Optional Features:
 - A. Touch-Tone Calling.
 - B. Dial Code Call.
 - C. Access to Paging (x).
 - D. Dial Dictation.
 - E. Attdt. Controlled Conference.
 - F. Tie Lines—Quantity.
 - G. Busy Lamp Field Only.
 - H. Toll Diversion (x).
 - I. Station DSS.
 - J. Station Controlled Conference.
 - K. Station features (x), Consultation Hold (x), Dial Station Transfer Add on (x).
6. Summary of Basic Termination Charges ¹ \$2,610.
7. Summary of Initial Charges: ² Total Non-Recurring, \$510; Total Monthly, \$635.

EXHIBIT 1A.—A.T. & T. Response to Testimony of Thrun Chevrolet

Northwestern Bell said the Telephone Credit Union was asked by a salesman from Thrun Chevrolet early this year to direct prospective car buyers to Thrun. He was told that the Credit Union policy is not to recommend dealers.

The NWB contract signed by Mr. Thrun for equipment clearly indicated it was subject to tariff changes. The tariff change granted before the Thrun system was installed affected about 50 similar contract situations. The higher installation charges were paid in all but the Thrun case—where NWB agreed to void the contract—and in two other cases where NWB was able to install service before the effective date of the tariff change.

Northwestern Bell denies that Thrun Chevrolet was offered a price reduction to induce purchase of its communications equipment rather than a competitor's.

¹ The following items are subject to Basic Termination Charges. Basic Termination Liability of \$2,610 applies to the common equipment and attendant's position. This amount decreases 1/60th for every month of continuous service.

² All equipment, service, liability and charges shown above are as of the date of this contract, are subject modification by the parties, and are subject to Telephone Company Rules, Regulations and Tariffs wherever applicable.

EXHIBIT 2.—LETTERS AND DOCUMENTS PROVIDED TO THE SENATE SUBCOMMITTEE ON ANTITRUST AND MONOPOLY REGARDING THE BELL SYSTEM AND INTERCONNECTION

Source	Commencing on page	Subject matter		
		State regulation	Bell practices	Interface
AMTEC, New York.....	2838		Service—delay or withholding.	Installation; malfunctioning.
ARCATA Communications, Inc., Washington.....	2769		Unhooking—delay or withholding; service—quality.	Untrained installers/repairmen; delay.
Austin Telephone Co., Texas.....	2825	Tariffs	Unhooking; rates.	Excessive charge; untrained installers/repairmen.
Belew Sound & Visual, Tennessee.....	2834	Bias toward the Bell System	Service—delay or withholding.	Installation; untrained installers/repairmen.
Business Communications, Inc., Michigan.....	2963		Service—quality.	
Business Communications Systems, Utah.....	2832	Cost of participating in regulatory proceeding.	Rates—anticompetitive; rates—special; business relationship; questionable statements concerning interconnect companies/equipment.	
C & P Telephone Co., Washington, D.C.....	2803		Service—delay or withholding; service—quality; harassment.	Malfunctioning; untrained installers/repairmen.
Central Travel & Ticket, Inc., Ohio.....	2838		Service—delay or withholding; service—cost; false statements; questionable statements concerning interconnect companies/equipment.	
Century Business Communications, Inc., Arkansas.....	2810		Service—quality; rates—anticompetitive; business relationship; harassment.	Untrained installers/repairmen.
Communication Consultants, Inc., Arizona.....	2827		Service—quality; rates—anticompetitive; rates—special.	Installation.
Donald K. Dornin, Inc., Florida.....	2862		Service—discontinuance; harassment.	Excessive charge.
Eastern Outboard Parts Corp., New Jersey.....	2896		Computer printout.	Do.
Eastern Telephones, Inc., New York.....	2819		Service—discontinuance; harassment.	
Essential Communication Systems, Inc., New Jersey.....	2967		Unhooking; harassment; advertising.	Availability—equipment/prices.
Executive Communication Systems, California.....	2837		Business relationship.	Availability—equipment/prices.
Fisk Telephone Systems, Inc., Texas.....	2768		do.	
Florida Interconnect Telephone Co., Florida.....	2809		Service—delay or withholding; service—quality; questionable statements concerning interconnect companies/equipment; harassment; advertising.	Malfunctioning.
Ford—Dub Miller Ford, Inc., Texas.....	2858		Service—delay or withholding; internal wiring—excessive charge/practices; rates; business relationship; political activity; monitoring lines.	Availability—equipment/prices; installation; malfunctioning; untrained installers/repairmen.
GCE Telephone Co., California.....	2839		Service—discontinuance; harassment.	Excessive charge; malfunctioning.
Gulf States Telephone Co., Alabama.....	2830		Service—delay or withholding.	
Harris, Dr. Roger J.....	2884			
Inter-Tei, Inc., Arizona.....	2850			

Mid-Western Telephone, Inc., Missouri.....	2861	Service—delay or withholding; service—discontinuance; business relationship; questionable statements concerning interconnect companies/equipment; harassment.	Installation.
National Telephone Systems, Inc., Massachusetts.....	2849	Harassment.	Availability—equipment prices; malfunctioning; untrained installers; repairment; delay.
New Jersey—Telecommunication Association of New Jersey.....	2852	Rates—anticompetitive; advertising.	
Prilec Telecommunications, Inc., Illinois.....	2842	Unhooking; service—delay or withholding; service—quality; internal wiring—excessive charge/practices; rates—advance announcement; equipment—special; questionable statements concerning interconnect companies/equipment; harassment; advertising.	Availability—equipment prices; installation; malfunctioning; delay.
Sawyer Communications Consultants, Inc., Oregon.....	2841	Service—delay or withholding; questionable statements concerning interconnect companies/equipment; harassment.	
Scoutub Agency, Inc., Insurance, New York.....	2851	Business relationship.	
Scott-Buttner Communications, Inc., California.....	2954	Rates—anticompetitive; business relationship.	
Sears, Roebuck and Co., Illinois.....	2967	Uncertainty of regulatory climate.	
Selection, Inc., Oregon.....	2917	Unhooking; internal wiring—excessive charge/practices; rates; questionable statements concerning interconnect companies/equipment; market purchases.	
Sound, Inc., Iowa.....	2864	Service—quality; internal wiring—excessive charge/practices; rates—anticompetitive; rates—advance announcement; business relationship; harassment; political activity.	Availability—equipment prices; excessive charge.
Systems Apparatus Sales—Northern Telecom, Inc., New York.....	2836	Market purchases.	
Telecommunication Systems of America, Inc., Tennessee.....	2803	Service—delay or withholding; business relationship.	
Telecel, Inc., Tennessee.....	2768	Equipment—other.	
Telephone Service Co. of America, Inc., Alabama.....	2806	Business relationship.	
Telerent Leasing Corp., North Carolina.....	2824	Rates—anticompetitive; business relationship.	
TeleResources, Inc., New York.....	2897	Service—delay or withholding; service—quality; rates—anticompetitive; business relationship; harassment; advertising.	Excessive charge; malfunctioning; delay.
Universal Communication Systems, Inc., Virginia.....	2883	Business relationship; harassment.	Excessive charge.

TELECI, INC.,
Jackson, Tenn., September 22, 1972.

Mr. JOEL W. WESTBROOK,
Sheehy, Cureton, Westbrook, Lovelace & Nielsen,
12th Floor,
American-Amicable Bldg.,
Waco, Tex.

DEAR JOEL: I am sending your a copy of a proposal from a telephone company in Alabama. If you will look on page six, you will see that they are offering to sell the Trimline phone rather than to lease it. I believe this is in violation of consent decree.

We are enclosing our check #2375, dated 9-22-72 in the amount of \$1,500.00.

Sincerely yours,

CURTIS C. GRAVES,
TELECI, INC.,
President.

Enclosure.

III. TRIMLINE PATIENT TELEPHONES

The TRIMLINE telephone instrument is recommended for patient stations at Brookwood, because it is ideal for bedside dialing convenience. This instrument fits in the palm of the hand, and has proven to be a significant factor in the quality of service experienced by patients in many hospitals.

Several hospitals are now using TRIMLINES for patient telephone service. If consoles are provided by each patient's bed, this set can be permanently mounted.

A variety of colors are available to complement any patient room decor, at no extra charge. Both wall and desk sets are available.

As of August, 1971, a special single purchase option is available with the TRIMLINE, offering an alternative to the leasing policy of South Central Bell. In lieu of the \$1.32 monthly lease charge, a single payment option charge of \$78.00 applies in addition to normal installation charges. This option is offered to allow customers more choice in the selection of a communications system.

FISK TELEPHONE SYSTEMS, INC.,
Dallas, Tex., October 2, 1972.

Mr. HARRY L. BLACK,
Data Marketing Manager,
Southwestern Bell Telephone Co.,
834-A, 500 South Ervay,
Dallas, Tex.

DEAR MR. BLACK: Would you please clarify your company's position regarding the installation of Voice Connecting Arrangements for use with customer provided equipment?

Since about February, 1972, we have been quoted a two to four week interval on these devices and they have been generally installed within those intervals on the requested dates.

As I understand our conversation today, these devices (VCA's) will now be on a minimum delivery interval of nine weeks with no firm date quoted.

Since the VCA's are solely a requirement of your company, we request that you provide us with firm dates with a reasonable interval for installation. How will this new policy affect pending installations for which we have established in-service dates?

If the delays are due to shortage of VCA devices, how will these devices be allocated to each city and district and how will priorities be established?

Please let me have your answer in writing as soon as possible so that proper arrangements can be made with your customers who choose to provide their own equipment.

Yours truly,

JOHN W. HINKLE.

SOUTHWESTERN BELL,
Dallas, Tex., November 1, 1972.

FISK TELEPHONE SYSTEMS, INC.,
2535 Farrington,
Dallas, Tex.

DEAR MR. HINKLE: This is to acknowledge your letter dated October 2, 1972, in which you request our Company's position regarding the installation of Voice Connecting Arrangements for use with customer-provided equipment.

We have numerous VCA's available, most of which, are furnished without delay. At the present time, we are able to quote firm intervals on most of the VCA's, with the exception of the STC (KS20721) interface unit. The STC units are in short supply and on an allocation basis.

Our position is that we will continue to try to meet your requested service dates; however, at times it will not be possible due to the temporary inability of the private suppliers to maintain adequate production to meet the demand. Orders for the STC's are allocated on the seniority of the date requested basis. In other words, first come first served.

We regret this situation exists and hope the problem will be rectified shortly. You will be advised when we are able to provide the STC units on a regular interval.

Yours truly,

HARRY L. BLACK,
Data Marketing Manager.

December 20, 1972.

Mr. KELLEY GRIFFITH,
Chief, Rates and Tariffs,
Common Carrier Bureau,
Federal Communications Commission,
Washington, D.C.

DEAR MR. GRIFFITH: Knowing of your interest in interconnect matters generally, I am writing to give you one more specific example of the hardship and damages suffered by interconnect suppliers as a result of their tariff dependency on telephone companies for the delivery of connecting arrangements.

Recently, Chadbourne Hosiery Co. decided to move its plant and business facilities from Charlotte, North Carolina to Gainesville, Georgia. In the process of opening these new facilities, Chadbourne's management entered into a contract with Petty Communications, Inc. to acquire an interconnected communications system. In accordance with that agreement, Petty promised an installation cut-over date of December 1, 1972.

To meet this promised installation date, in the early part of December, Mr. Paul Lackey, President of Petty, personally visited with Mr. Walter J. Murray, Sales Manager of the Southern Bell Telephone Co., Gainesville, Georgia Division, to arrange for delivery of the required interface devices. Mr. Murray assured him that meeting the December date would be no problem, and promised to have the connecting arrangements and Bell installers at the customer's premises on that date.

Thereafter, on November 30, 1972, Petty received a letter from Mr. Murray informing it that Southern Bell had rescheduled the Chadbourne connecting arrangement installation date to December 8, 1972. On December 8, Murray, acting for Southern Bell, rescheduled the installation to December 13, 1972.

On December 13, Petty's installers on the Chadbourne job site waited throughout the day for the arrival of Bell personnel. During the day, numerous telephone calls were placed to Murray who, finally at 4:30 in the afternoon, promised that Bell people would be on the job "first thing" the following morning.

When the following day (December 14, 1972) Bell installers had not arrived by 9:30 A.M., Lackey again called Murray. Instead of reaching Murray, however, he was put in touch with Mr. John Whitmire, Assistant Sales Manager of Southern Bell. Whitmore told Lackey that Murray went on vacation, had left no information or instructions concerning the Chadbourne job, that he, Whitmire, knew nothing about the matter, and that nothing could be done until Murray's return.

In desperation, Mr. Lackey then called Mr. L. Edmund Rast, President of Southern Bell. After explaining the situation to him, Mr. Rast promised that Bell installers would be on the Chadbourne job within one hour. This statement was made at 10:30 A.M. on December 14. Within one hour and twenty minutes (at 11:50 A.M.), Mr. Murray, who was suddenly off vacation, called Mr. Lackey to notify him that Bell would have "someone" at Chadbourne in two hours.

Petty's personnel then waited at Chadbourne for the balance of the day, but nobody from Southern Bell arrived. At 4:45 P.M., Mr. Rast was again contacted and told the situation. By 5 P.M., Mr. Claude Blount, District Marketing Manager of Southern Bell, contacted Mr. Lackey and promised Bell installers on the job the following morning, December 15.

The following morning at 8:30 A.M. the Bell installers finally arrived, but were unfamiliar with connecting arrangements, didn't know what they were used for, and turned them over to Petty technicians for installation.

It should be noted that during this period, Chadbourne was forced to delay taking occupancy of its new building. Finally, when the company could no longer avoid making the move, it took possession of the premises on December 12, and was required to go without communications services for two and a half days.

During the course of Bell's rescheduling, and failure to meet promised installation dates, Petty personnel nevertheless expended a total of 8 man days on the Chadbourne site, idly waiting on the expectancy of connecting arrangement deliveries. This fact—with which Bell is completely familiar—cost Petty \$3,000 in losses on the job.

This information was transmitted to me by telephone, and may be inaccurate in minor detail. I'm nevertheless assured of its truth in substantial measure. I am conveying it to you not only for your consideration of any investigation the Commission may care to undertake, including the initiation of forfeiture action, but also for the purpose of adding to your file another example of the general situation which persists and recurs with regularity throughout the United States.

The dependency of interconnect suppliers on the delivery and installation of connecting arrangements by telephone companies is anti-competitive in the extreme. The legislative delegation of authority to carriers, which enables them to require that they will be the sole source for furnishing, installing, and maintaining connecting arrangements, openly invites the carrier industry to use the law for monopoly exploitation intentionally designed to destroy competition. I remain certain that this is not what the Commission had in mind when it accepted Bell's assertion of its responsibility to protect the network.

Any assistance the Commission may provide in redressing this situation would be greatly appreciated.

Sincerely yours,

EDWIN B. SPIEVACK.

AFFIDAVIT

I, John R. Stanton, having been first duly cautioned and sworn, on oath depose and say:

1. I am Regional Manager of Arcata Communications, Inc., (hereinafter Arcata) with offices located at 61 Jackson Street, Canton, Massachusetts. In this capacity I am responsible for the business affairs of Arcata in the greater Boston area.

2. I submit this affidavit to report the lack of knowledge, training and cooperation of New England Telephone and Telegraph Company (hereinafter NET) employees responsible for the maintenance and repair of connecting arrangements required by NET and AT&T's tariffs. These devices are used as interfaces in the connection of customer-provided telephone equipment to the telephone lines of NET. Upon review of my records and personal experience in these incidents, I state that the following incidents took place in the manner and on the dates set forth below.

3. On Monday, November 1, 1971, at approximately 10:00 a.m., Gilburn Industries, an Arcata customer located at 80 Brook Street, Plympton, Massachusetts, placed a call to NET Repair to report that an off-premise extension connecting their Plympton and Bridgewater office was not functioning. They requested that NET find the problem and repair it. However, by November 3, 1971, NET had failed to respond in any manner to the customer's request. Upon being summoned that day, Arcata found that the interface devices servicing one of

these locations was situated in a cement manufacturing area where dust from a mixing operation caused the interfaces to malfunction. In responding to Arcata's call for service, Mr. James Kritzmacher of NET Marketing, stated that Mr. Davies of the NET Plant had told him that "he did not have competent people available to repair the system".

4. Because of NET's lack of cooperation and training in correcting their own equipment malfunction, Arcata was forced to spend nearly \$2,000.00 in an effort to convince NET that the situation was caused by NET and not Arcata, and that NET should remedy it. Arcata had previously been promised by Messers R. A. Clement, P. I. Guinee, R. A. Olsen, and R. J. Huggins of NET that NET would commence on-site repairs within forty-eight hours. NET has yet to meet this commitment on any occasion.

5. Of a far more serious concern are the incidents which occurred on the premises of another Arcata customer, American Hospital Supply Corporation, 20 Wiggins Avenue, Bedford, Massachusetts, where Arcata installed a PABX system in April, 1971. American Hospital's Mr. Paul Kelly has told Arcata that his firm estimates that the service problems it has encountered have caused the loss of over \$50,000.00 in business due to calls "lost" by the system. Understandably, this has caused considerable strain in the relations between Arcata and its customers.

6. Beginning in September, 1971, American Hospital reported that calls in progress through the telephone system were being lost, many callers reporting that this frequently happened. The situation continued for several months, during which time Arcata, by testing its own system, verified that the problem originated in NET's equipment. On more than ten occasions, Arcata asked NET to correct the problem, and on many of these occasions had to wait as long as four days for a response. Moreover, in each case, after a cursory examination of the problem, NET personnel stated "it's Arcata's problem".

7. Due to the obvious inability of NET to correct the problem, Arcata was forced to engage the services of Mr. Isamu Kudo, a designer of the OKI 220 PABX system installed at American Hospital Supply. Beginning on October 14, 1971, Mr. Kudo spent nearly three full weeks at the customer's premise in an effort to pinpoint the cause of the difficulty. In addition, Arcata rewired the entire system. Mr. Kudo determined that NET's CDH interface devices had been improperly grounded by NET personnel and that there were four broken wires in the CDH cabinet. In an act of sheer incompetence, the NET installers had grounded their interfaces to Walker duct rather than to a more proper ground.

8. When Arcata informed NET of the four broken wires in the CDH cabinet on October 29, 1971, NET dispatched a repairman. However, he again failed to determine the cause of the problem, blamed the malfunction on Arcata, and left the premises.

Mr. Philip Donohue, an Arcata installer familiar with the problem, called NET repair once again and told them what was causing it. When the NET repairman arrived at American Hospital Supply, Mr. Donohue led him to the source of trouble and instructed him regarding its repair. The repairman followed his instructions and repaired the faulty wiring. To correct the faulty ground connection found by Mr. Kudo, Arcata was forced to reground the interface wires on a water pipe thirty feet away from the interface cabinet.

9. For two and one-half weeks following these repairs, American Hospital Supply did not lose a single call. Then on Tuesday, Nov. 2, 1971, calls were again lost. Arcata and Mr. Kudo arrived at American Hospital within two hours and determined that the problem was caused by the failure of NET's central office to provide proper current and db levels. This caused the interface devices to fail, with the result that the voice levels of the entire system were extremely low. This problem, originating in NET's central office, has never yet been completely corrected.

10. Similar instances involving NET incompetence and unresponsiveness occurred at C. Pappas Company, 647 Summer Street, Boston, Massachusetts; Key-Data Corporation, 1 Gateway Center, Newton, Massachusetts; and Deckhouse Associates, 930 Main Street, Acton, Massachusetts.

JOHN R. STANTON.

AFFIDAVIT

I, Mark E. Gaynor, having been first duly cautioned and sworn, on oath depose and say:

1. At all times recited in the instances described below, I was employed as Tariff Specialist and Telephone Company Coordinator for the Midwestern oper-

ation of Arcata Communications, Inc., located at 7366 North Lincoln Avenue, Lincolnwood, Illinois. In this capacity I was responsible for interpretation of telephone company tariffs and regulations and functioned as a liaison between Arcata, the telephone companies, and the state regulatory commissions. Upon review of my records and personal experience with the following described incidents, I state that the events described took place in the manner, and on the dates, as indicated.

2. I submit this affidavit to report numerous incidents of apparent incompetence and dereliction of Illinois Bell Telephone Company employees (IBT). On the occasions cited below, customers electing to install a telephone system provided by Arcata have experienced a total failure by IBT to provide even the minimum service which they, as mutual customers of IBT and Arcata, have a right to expect from a purveyor of utility service. Many customers have expressed anger and dismay concerning the lack of cooperation or competent service afforded to them by IBT after becoming customers of Arcata. Many firmly believe their trouble with telephone service since becoming interconnect customers represents a form of harassment and revenge exacted against persons who cause IBT to lose telephone equipment business. Most will admit they had occasional problems with Bell-provided telephone service and equipment prior to their Arcata installations, but readily agree that the magnitude of problems attributable to IBT have increased dramatically since their decision to seek out the interconnect industry for the right to acquire or lease their own telephone systems.

3. Many customers experienced the failure of one or more Bell-provided interfaces, but the following lists those customers whose service was adversely affected by problems originating in the IBT central offices or cables by which they are served. Failure in both these areas has resulted in severe inconvenience to the customer and serious injury to Arcata's business reputation, since, generally, an interconnect company must bear the brunt of blame for poor service until the source of trouble is proved to reside elsewhere. Because the list of such problems is lengthy, the descriptions are brief, but additional information is available. All the hours noted as spent by Arcata installers are attributable to the fact that Arcata is the first to respond to a call for assistance due to a telephone service breakdown. Once at the customer's premises, experience has proven that Arcata must remain there until IBT has corrected the cause of malfunction. If Arcata leaves before IBT has performed its work, IBT personnel invariably inform the customer that the trouble is not due to telephone company equipment, or simply blame the problem on Arcata. Thus, the only way to insure the repair of the malfunctioning equipment and to protect against slander, is for Arcata to remain at the customer's premises.

4. (a) On March 2, 1971, *Guidestar Company, Inc.*, 740 Rush Street, Chicago, Illinois, reported to Arcata that it had no dial tone on its second telephone trunk. It was discovered that IBT had converted its trunk lines from ground to loop start without Arcata's knowledge. On March 3, 1971, the customer reported that all of its lines were completely dead. Upon inspection, Arcata traced the problem to IBT's central office. On March 4, 1971, the customer reported that his first line was inoperable. IBT repair was called and they admitted it was their problem. Arcata installers, however, spent six hours attempting to get IBT to correct the trouble.

(b) On May 19, 1971, all lines in the Arcata PABX at *C. W. Johnson Company*, 6138 North Clark Street, Chicago, Illinois, were reportedly experiencing an excessive amount of static, causing interference. The trouble was traced to a problem in the IBT central office. Arcata installers spent three hours in curing this IBT problem. The customer was to have a new trunk line installed by IBT on March 8, 1971, but on March 10, 1971, the work had not yet been performed. When called for an explanation, IBT said the order was one of many that had recently disappeared.

(c) On December 1, 1971, *Corbett Clinic*, 1380 Lake Street, Chicago, Illinois, reported no dial tone on two of its trunk lines. An Arcata call to IBT finally resulted in corrective action at the central office. However, Arcata installers were required to expend seven hours on the customer's premises before IBT agreed to correct the malfunction.

Mr. Thomas A. McGowan, Arcata Plant Manager, reported that on May 13, 1971 at approximately 6 p.m., he received a call from Peter Brooks at Arcata's Repair Department notifying him that IBT had converted the cus-

tomers' trunk lines from loop start to ground start. Arcata was required to spend two hours overtime work to cure the problem.

(d) On June 31, 1971, all the telephone lines of *Pletka & Associates*, 4414 West Roosevelt Road, Hillside, Illinois, went dead because IBT personnel damaged the cable on which they were working while in the area. Arcata spent one and one-half hours to remedy this situation.

(e) On June 2, 1971, *Mosler Safe*, 4560 Touhy Avenue, Lincolnwood, Illinois, reported that its Chicago Foreign Exchange trunk was dead. The trouble was diagnosed by Arcata as a repeater problem in the IBT central office. Arcata's installers spent two and one-half hours getting IBT to repair its equipment. On May 19, 1971, another problem occurred in IBT's central office, causing another of the customer's telephone lines to be inoperative. Arcata again spent two and one-half hours on a problem directly attributable to IBT failure.

(f) On March 2, 1971, *F. E. Moran, Inc.*, 2265 Carlson Drive, Northbrook, Illinois, reported no dial tone on one of its lines. The trouble was traced to IBT's central office where, without Arcata's knowledge, the customer's trunk lines had been converted from a ground start to a loop start connection. Arcata was required to spend five man-hours in getting IBT to modify the connection. On October 5, 1971, Arcata discovered that a defective CDH interface at the customer's location was interfering with his telephone service, and spent forty-five minutes to correct the problem.

(g) Due to IBT's inability to distinguish between the connection of working and non-working lines in IBT cable leased by Arcata, six off-premise extensions for *Advance Transformer*, 2950 North Western Avenue, Chicago, Illinois, would not function. On May 12, 1971, IBT furnished these cables to Arcata. IBT later admitted six lines were inoperative at the time of installation, but the fact was unknown because of IBT neglecting to test them. Approximately four hours were spent by Arcata on a new cable installation.

On May 24, 1971, IBT construction crews cut a cable near the customer's premise, causing a service outage at the switchboard and its extensions for approximately six hours. Arcata's installers spent six hours in an effort to get IBT to repair its cable.

(h) On May 4, 1971, a problem in the IBT central office caused *Woodfield Ford*, Plum Grove and Golf Roads, Schaumburg, Illinois, a service outage for approximately one-half hour.

On May 6, 1971, the customer encountered a busy condition on one incoming line. Upon inspection, Arcata found that IBT had changed the lines from loop to ground start without notification. This situation recurred on May 17, 1971. Three hours of Arcata installer time was required in getting IBT to reestablish proper connections.

(i) On May 18, 1971, *Air Balance*, 3070 West Grand Avenue, Chicago, Illinois, reported trouble with the automatic transfer feature and its Arcata system. The problem was traced to IBT's central office where a transmission failure was identified as causing a malfunction in the customer's lines. IBT repair personnel corrected the problem after incurring the loss of two hours of an Arcata installer's time.

(j) On May 5, 1971, *Chalet Ford*, 801 West Dundee, Arlington Heights, Illinois, called Arcata to report trouble in placing telephone calls. On inspection, Arcata discovered the problem was caused by IBT's central office. Before this situation had been resolved, Arcata's installer spent one and one-half hours on the customer's premises.

(k) On April 9, 1971, *Stainless Processing Company*, 11900 South Cottage Grove Avenue, Chicago, Illinois, reported that its fifth trunk was inoperative. After verifying the problem was not caused by its equipment, Arcata traced the problem to IBT's central office. The malfunction was cared for by IBT but by that time Arcata had been required to spend two hours at the customer's premises.

On April 26, 1971, a similar problem occurred in IBT's central office which took another four hours to correct.

(1) Beginning on November 30, 1970, IBT caused the Arcata installation at *McKinsey and Company, Inc.*, Two First National Plaza, Chicago, Illinois, to be delayed approximately two weeks because it took so long to install and test its interface devices. The customer reported to Arcata that its first line was inoperable on January 15, 1971. The problem was traced to a solder

splash on the wires in IBT's central office and was not corrected until January 18, 1971.

(m) On May 6, 1971, *Heights Motors, Inc.*, 433 14 Street, Chicago Heights, Illinois, reported to Arcata from a coin telephone booth, that none of its telephone lines were working. After investigation, Arcata learned that an IBT underground cable had failed and that all lines served by that cable were inoperative. Arcata worked with IBT in an effort to restore customer service. The work was completed twelve hours later.

(n) On May 24, 1971, *American Society of Clinical Pathologists*, 21 West 100 West Harrison, Chicago, Illinois, reported a dead private line. On inspection, Arcata found that IBT had disconnected the line in its central office. IBT was called and the problem was resolved after one and one-half hours delay.

On June 4, 1971, the customer reported that it could not get dial tone on one of its telephone lines. Upon inspection, Arcata traced the problem to IBT's central office, where it took two and one-half hours to repair.

(o) On May 6, 1971, *Lawson, Stuart and McClory*, 135 West Jackson Boulevard, Chicago, Illinois, reported to Arcata that its telephone lines were dead. Upon inspection, Arcata verified that the problem was in the IBT central office. IBT corrected the situation only after Arcata had been required to spend two hours at the customer's premises.

(p) On June 16, 1970, because of problems in IBT's central office, Arcata spent eight hours at *Victory Beauty Supply*, 22 West Madison Street, Chicago, Illinois, in an effort to get IBT to correct its malfunction.

(q) On June 17, 1971, *Omega Press*, 10 West North Avenue, Lombard, Illinois, reported to Arcata that conversations over its telephone system were barely audible. Upon arrival, Arcata learned that IBT had been working on the underground cable serving the customer and this work had adversely affected its telephone lines. The situation was corrected only after one and one-half hours of effort by an Arcata installer.

(r) On May 10, 1971, *Weil Pump Company*, 1530 North Fremont Street, Chicago, Illinois reported it could not get dial tone on one of its telephone trunks. Upon arrival, Arcata found through testing that IBT had been working on underground cable in the area and that this had affected the customer's service.

(s) On November 30, 1971, the installation date of a PABX system for *Westenhoff and Novick*, 222 West Adams Street, Chicago, Illinois, Arcata found that IBT was still working on the customer's telephone lines in its central office, even though this work should have been completed several days before. Arcata was forced to delay its installation for five and one-half hours until IBT completed its work.

On November 6, 1970, the customer reported to Arcata that its off-premise terminals were not working. Upon inspection, the trouble was traced by Arcata to a fault in IBT's underground cable. It took IBT seven hours to repair its cable, during which the customer was unable to contact its off-premise location.

(t) On May 28, 1971, *Northmoor Country Club*, 820 Edgewood Road, Highland Park, Illinois reported it was not receiving any incoming calls. Upon inspection, Arcata proved the problem originated in the IBT central office. The customer reported that it had missed many important calls due to this central office malfunction.

On February 19, 1971, the customer reported it had no dial tone on one of its lines. Upon Arcata's inspection, the problem was traced to the IBT central office.

(u) On July 24, 1970, *Cement Materials and Tamms Industries*, 1301 Ardmore Avenue, Itasca, Illinois, reported to Arcata that all its telephone lines were inoperative. Upon arrival, Arcata found that work was being done on the customer's lines in the IBT central office, causing its lines to malfunction.

On July 28, 1970, IBT again worked on the customer's lines from its central office without Arcata's knowledge, causing the lines to be inoperative.

On July 31, 1970, the customer reported that there was no indication of an incoming call at its switchboard. Arcata found, after inspection, that IBT had reversed the wires in its central office without first notifying the customer, causing the lines to be inoperative.

On August 4, 1970, the customer's hunt features were reported not working. Upon inspection, Arcata found the malfunction was caused by low voltage

from IBT's central office, which caused a failure in the IBT connecting arrangement.

On November 30, 1970, the customer reported that its calls were disconnecting for no discernable reason. Arcata learned that IBT cable splicers, working on cables in the area, had inadvertently caused the telephone lines to be inoperative.

On December 10, 1970, the customer reported it could get no dial tone on its lines. Upon inspection, Arcata traced the problem to the IBT central office.

On August 26, 1970, the customer reported that one of its trunks was not working. Upon inspection, Arcata found that IBT had reversed its wires in the central office from loop to ground start, putting the line out of service.

On September 30, 1970, the customer reported noise on its lines. Arcata traced the problem to the cable coming from the IBT central office, and requested IBT to repair its malfunction. This problem persisted until October 1, 1970.

On October 2, 1970, the customer reported to Arcata that one of its lines was out of service. Upon inspection, Arcata found the malfunction was the result of testing by IBT in its central office.

On June 11, 1971, the customer reported to Arcata that two of its lines were not working. Upon inspection by Arcata, the problem was traced to a malfunction in IBT's central office.

(v) On June 16, 1971, *Borg, Inc.*, 1616 West 63 Street, Chicago, Illinois reported to Arcata that two of its Chicago FX lines were inoperative. Upon inspection, Arcata traced it to an IBT central office malfunction.

(w) The cutover of *Anderson, Luedeka, Fitch, Even and Taben*, 135 South LaSalle Street, Chicago, Illinois, to an Arcata system was supposed to have occurred at 5:00 p.m. on April 23, 1971, but because of Bell's inability to condition the lines in the central office for ground rather than loop start, the cutover was delayed until midnight. Arcata was required to spend seven hours of overtime to correct the IBT problem.

(x) Arcata was to have installed a PBX system at *Merriam, Marshall, Shapiro and Klose*, Two First National Plaza, Chicago, Illinois, on April 19, 1971, but IBT did not have the lines changed from loop to ground start as previously arranged. The cutover was delayed approximately six and one-half hours due to IBT's failure.

(y) *Amco Wire Products Corporation*, 325 North Hoyne Avenue, Chicago, Illinois, was unable to use one of its lines from June 7, 1971, to June 10, 1971. After being informed of the problem by Arcata, it took IBT three days to repair the problem caused by a loose telephone wire. The IBT repairman sent to repair the connection disconnected the customer's other lines by mistake. It was not until 4:30 that afternoon that the lines were restored by IBT.

(z) Following the installation of its PABX system by Arcata on April 9, 1971, *Murphy Motor Express, Inc.*, 2920 South 19 Avenue, Broadview, Illinois, reported to Arcata that all of its trunks were inoperative. Upon inspection, Arcata proved the problem was caused by malfunctions in the IBT central office. IBT did not repair the problem until long after Arcata had reported it.

On May 18, 1971 another problem occurred and following the customer's report, Arcata proved the problem was due to a malfunction in IBT's central office.

Due to problems in the IBT central office on June 10, 1971, the customer's second telephone line was inoperative.

(aa) On September 29, 1970, one of the trunks at *American Envelope Company*, 4400 West Ohio Street, Chicago, Illinois, was reported to be inoperative. Upon arrival, Arcata traced the problem to a malfunction in the IBT central office.

On September 22, 1970, the customer reported to Arcata that it was having problems on all its incoming trunks. Upon inspection, Arcata found that an IBT employee, installing a coin telephone, was using the customer's lines for testing purposes, and had put the customer's service out of order.

On September 16, 1970, Arcata found that a short in the IBT central office caused one of the customer's lines to be inoperative.

On September 16, 1970, the customer complained to Arcata that a caller had told it that, when the caller dialed its PABX, no one answered. No ringing occurred at the PABX and the customer was out of service for three and three-quarters hours due to problems which Arcata, upon arrival, proved were caused by a malfunction in IBT's central office.

On November 29, 1970, the customer reported to Arcata that it had been waiting for several important calls, that these calls had been made to him, but that the callers reported they had received no answer. The problem was traced by Arcata to a malfunction in IBT's central office.

5. Since a law suit was filed by Arcata against IBT in May, 1971, the number of service problems has declined dramatically. Not only the instances involving service failures, but also instances of defective interfaces, marketing interference, and unfair competitive practices. Based upon this experience, it is difficult to avoid the conclusion that the only way to get a positive response from IBT is to bring suit against it.

MARK E. GAYNOR.

ARCATA COMMUNICATIONS, INC.,
Seattle, Wash., June 15, 1971.

Mr. ED SPIVICK,
Arcata Counsel,
San Francisco, Calif.

DEAR MR. SPIVICK: Enclosed is a rough draft of the letter that the General Manager of Kilsby Tube Supply in Seattle wished to send to the Federal Communications System. I asked him to draft this letter without sending it directly so that we may handle it in the best possible manner.

For any additional questions that you have regarding this, you may get in touch with Bob Upmeyer, Seattle Plant Manager, on the 17th and 18th of June in San Francisco, Plant Manager's Meeting.

Sincerely,

JERRY BURNS,

PUBLIC,
Olympia, Wash.

Enclosure:

FEDERAL COMMUNICATIONS COMMISSION,
Washington, D.C.

GENTLEMEN: We have just installed a new telephone system in our Seattle facility. This is supplied by a private company, Arcata Communications Inc.

We have a leased tie line between our Seattle and Los Angeles warehouses. With our new touch tone equipment we are only able to reach Bell Telephone's central office in Los Angeles, and cannot get through to our office. Bell has refused to install the proper equipment that will allow our touch tone signal to be converted to a signal that can be handled by our Los Angeles equipment. They have installed equipment in Dallas (Grand Prairie) which allows touch there to connect and operate with Los Angeles rotary equipment. We feel we are being discriminated against because we are using private equipment in our office.

As a result of this action by the telephone company, we are being forced to use a rotary type phone and have our new touch tone phones put in storage. We would appreciate your help in correcting what we believe to be a very unfair practice.

Sincerely yours,

E. H. R.

WESTERN ELECTRIC,
CUSTOMER PLANNING DIVISION,
Newark, N.J., October 12, 1970.

Re: Your Order No. 75-0387—W. E. Order No. 389969.

ARCATA COMMUNICATIONS,
San Francisco, Calif.

GENTLEMEN: This is in reference to the above-mentioned order, which we will be unable to accept since Western Electric, as manufacturing and supply unit of the Bell System, would like to be able to devote all of its efforts to meeting its primary obligations of satisfying the needs of the Bell System Operating Telephone Companies and the United States Government. Accordingly, Western Electric has not solicited the business of other customers nor authorized Graybar to do so. In addition, over the years, Western has sought to reduce its sales to such customers. We have decided we will no longer be a source of supply to customers other than communications common carriers,

except for material required to repair or maintain Western Electric products previously furnished. Since we do not consider Data Sets to be a repair or maintenance product, we have not accepted your order.

Yours truly,

W. H. ABPLANALP,
*Department Chief,
Commercial Relations.*

DENNY: For your info only. These were ordered for Optimum—Joel has been told we can not supply. I have the original of this letter in case Headquarters might want it.

FRANK.

P.S. The order was placed with W. E. Co. by Graybar.

In the United States District Court in and for the Southern District of Florida,
Miami Division

Civil Action No. 71-208-Civ-JLK

ARCATA COMMUNICATIONS, INC., A CALIFORNIA CORPORATION, PLAINTIFF
v.

SOUTHERN BELL TELEPHONE & TELEGRAPH CO., A NEW YORK CORPORATION, AND
AMERICAN TELEPHONE & TELEGRAPH CO., A NEW YORK CORPORATION, DEFENDANTS

Deposition of K. ULMER, taken on behalf of the Plaintiff pursuant to Notice of Taking Depositions and stipulation thereto.

Appearances: HELLIWELL, MELROSE & DEWOLF, by THOMAS B. DEWOLF, Esq., and JOE MARTINEZ, Esq., of counsel, Attorneys for Plaintiff.

HUBERT F. OWENS, Esq., and WALTON LANTAFF SCHRODER CARSON & WAHL, by JAMES KNIGHT, Esq., of counsel, Attorneys for Defendant.

Also Present: Mr. TOM HINGLE.

STIPULATIONS

It is stipulated and agreed by and between counsel for the respective parties that:

1. Reading and signing of the deposition by the witness are waived;
2. Notice of filing of the deposition is waived;
3. The deposition may be taken at this time in lieu of the time noticed.

Thereupon: K. Ulmer was called as a witness and, having been duly sworn, was examined and testified as follows:

DIRECT EXAMINATION (excerpt)

By Mr. DEWOLF:

Q. State your full name and your address.

A. Kaye Ulmer.

Home address?

Q. Home address.

A. 17539 Southwest 59th Court, Fort Lauderdale.

Q. You are employed by Southern Bell?

A. Yes.

Q. What is your position with Southern Bell?

A. Supervising Installation Foreman, North Dade District.

Q. How long have you been employed in that position with Southern Bell?

A. Actually, I acquired the title February 1, but I have been in the capacity since the middle part of December or the first part of January.

Q. 1970-1971?

A. Yes.

Q. How long have you been with Southern Bell?

A. Twenty years.

A. Well, I occasionally go out and inspect a job.

Q. Did you inspect that one?

A. No.

Q. Automatic?

A. No.

Q. Did you go to that location at all?

A. On January 14? Yes.

Q. What did you do when you went there?

A. I talked to Mr. Teofani, and he told me he was having problems. Mr. Goetz had been there all day long, and he verified they were having pulsing problems, and Mr. Teofani was in trouble, because he was having service trouble. He couldn't call out at times.

Q. He is the man with Weathermatic?

A. Yes.

I talked to him. He said he was having trouble.

I said, "I know you're having problems. We don't know what the problem is, exactly."

Arcata didn't know what the problem was, and I authorized them to by-pass the interface in order to give him service.

Q. Do you know whether his service improved then?

A. Yes, it did.

Q. Did you take any other action with respect to that

* * * * *

AFFIDAVIT

I, Gerald W. Burns, having been first duly cautioned and sworn, depose and say:

1. I am Regional Manager of Arcata Communications, Inc. (hereinafter Arcata) with offices located at 2653 Eastlake Avenue East, Seattle, Washington. In this capacity I am responsible for the business affairs of Arcata in the greater Seattle area.

2. I submit this affidavit to show the failure of Pacific Northwest Bell Telephone Company (hereinafter PNB) to supply connecting arrangements in accordance with PNB and AT&T tariffs.

3. On August 13, 1971, Arcata requested that PNB install six CDH interfaces on September 7, 1971, on the premises of Superior Fast Freight, 150 South Horton, Seattle, Washington. PNB agreed to this date, but on the day of installation, said that it could not supply the interfaces. The cutover of the customer's system was delayed until September 21, 1971. During that time, and because of the delay by PNB, the customer was substantially inconvenienced and Arcata suffered injury to its business reputation.

4. That Arcata could expect more delays in delivery of interface devices by PNB became evident on November 16, 1971, when Mr. Forrest Smith of PNB responded by telephone to an October 7, 1971, letter from Arcata. In both the letter and the telephone conversation, Mr. Smith was asked about the availability and price of STC interfaces. In answer to this question, he stated, "it will be January, 1972, before we have them available". Arcata's Mr. Donald Vandriel asked him for written confirmation of this statement and Mr. Smith agreed to furnish it. However, he has never done so.

GERALD W. BURNS.

AFFIDAVIT

I, R. J. Wood, having been first duly cautioned and sworn, on oath depose and say:

1. I am Regional Plant Manager for Arcata Communications, Inc. (hereinafter Arcata) with offices located at 8585 North Stemmons Freeway, Suite 838 Twin Towers South, Dallas, Texas. In this capacity I am responsible for the installation, maintenance, and repair of all Arcata telephone systems installed within the greater Dallas area.

2. This affidavit is submitted to describe those instances in which Southwestern Bell Telephone Company (hereinafter SWB) has failed and/or refused to provide connecting arrangements required by AT&T tariffs for the connection of customer-provided telephone equipment to its telephone lines. These failures have caused considerable embarrassment and injury to Arcata's business reputation, and have inconvenienced its customers by forcing them to delay their relocation plans as a result of Arcata being prevented from completing its installations on previously agreed commitment dates.

3. A case in point is the October 15, 1971 installation by Arcata of a telephone system for Commercial Drywall Company, Inc., 3801 Fordham, Dallas, Texas. Arcata made arrangements with SWB for the installation of interface devices on that date. However, on the appointed day of installation, SWB

failed to appear with its equipment. From that date, until November 10, 1971, Arcata received seven different tentative installation dates from SWB's marketing representatives, Messers Harold Warman, Kirk Golden, Harold Black. All were involved in an attempt to supply the STC interfaces, but reported that they were unsuccessful "because Western Electric had subcontracted and had to reject the first shipment from the manufacturer".

This and other such delays are apparently caused either because Western Electric does not adequately supply SWB, or SWB refuses to inventory interface devices in sufficient quantities to supply the demand therefor.

R. J. Wood.

AFFIDAVIT

I, Frank McAloon, having first been duly cautioned and sworn, on oath depose and say:

1. I am Regional Manager of Arcata Communications, Inc. (hereinafter Arcata) with offices located at 90 Park Avenue, New York, New York. In this capacity I am responsible for the business affairs of Arcata in the greater New York City area.

2 I submit this affidavit to recite those instances in which New York Telephone Company (hereinafter NYT) has failed or refused to supply and install connecting arrangements as required by AT&T tariffs.

3. Chemtex, Inc., 850 Third Avenue, New York, New York contracted on June 4, 1971, for the installation by Arcata of a Nepax PABX telephone system, manufactured by Nippon Electric of Japan. On July 27, 1971, Arcata requested NYT to supply connecting arrangements. NYT refused on the ground that it could not provide service until after the termination of the strike by its plant employees. Subsequently, on frequent occasions, Arcata requested NYT to install the connecting arrangements, but again received negative responses. This denial is all the more aggravated because Nippon PABX systems are designed to operate through direct electrical connection to telephone lines, and it is known that Bell System companies offer the identical equipment to their customers without the use of connecting arrangements.

4. Sulzer Brothers, 90 Rector Street, New York, New York, contracted with Arcata for the installation on October 8, 1971, of an Ericsson AKD 741 PABX system. On September 9, 1971, Arcata requested NYT to install ten CDH connecting arrangements at customer's premises on October 8, 1971. For the same reasons given in the Chemtex incident previously cited, NYT refused to supply the devices.

5. British Steel, 767 Fifth Avenue, New York, New York, contracted with Arcata for the October 1, 1971 installation of an Ericsson AKD 741 PABX system. On August 30, 1971, Arcata requested that NYT install seven CDH connecting arrangements on the aforementioned October date, but was told that NYT would not do so because of the NYT strike.

6. Wickersham Medical Center, 133 East 58 Street, New York City, contracted with Arcata for the November 8, 1971 installation of a key telephone system. On October 8, 1971, Arcata requested a November 8, 1971 installation date for nine CD9 connecting arrangements. NYT refused, again using the strike as an excuse to deny service.

7. AFA Tours, 1 North Broadway, White Plains, New York, contracted with Arcata for the September 17, 1971 installation of a key telephone system manufactured by Nitsouko Electronics of Japan. On August 26, 1971, Arcata requested that NYT provide four CD9 connecting arrangements on September 17, 1971. NYT refused, once again blaming the strike.

FRANK McALOON.

AFFIDAVIT

I, William Christopolous, having been first duly cautioned and sworn, on oath depose and say:

1. I am Regional Plant Manager of Arcata Communications, Inc. (hereinafter Arcata) with offices located at 110 Main Avenue, Passaic, New Jersey. In this capacity I am responsible for the installation, maintenance, and repair of all telephone equipment installed by Arcata in the greater Newark area.

2 I submit this affidavit to demonstrate the failure of New Jersey Bell Telephone Company (hereinafter NJB) to supply and install the connecting arrangements required by AT&T and NJB tariffs. As a consequence of their

failure, permission was given by NJB for Arcata to effect direct, electrical connection of its telephone equipment to the telephone lines of NJB.

Upon review of my records and personal experience in these incidents, I state the following occurrences took place in the manner and on the dates set forth below.

3. The first occurrence took place on the premises of Pharmacaps, Inc., 1111 Jefferson Avenue, Elizabeth, New Jersey where Arcata had arranged with NJB for the installation of three CDH interface devices. Preceding the agreed upon cutover date, Arcata had installed a Mini-Max PABX system, manufactured by Meisei Electric Company, Ltd., of Tokyo, Japan. On the scheduled day of installation, Arcata was ready to connect the PABX when it was informed by NJB that the telephone company was not able to supply the correct interfaces. Because the customer was in need of telephone service and could not afford further delay, NJB authorized Arcata to perform its installation through the direct electrical connection of its PABX system to the NJB telephone lines. To this date I am unaware of any harm to the telephone lines or central office of NJB as a consequence of this action and have not yet been informed of any by NJB.

4. The second such occurrence took place on the premises of Whitney Associates, 18 Cleveland Street, East Orange, New Jersey. Arcata had arranged with NJB for the October 22, 1971 installation of four STC interface devices and was to have installed an Arcata custom key system, manufactured by Voycall Sales of Oakland, California on that date. On the day of cutover, Arcata observed that those NJB employees present to perform the installation of STC devices were unable to complete their task. These Bell employees admitted that they did not have the knowledge or experience needed to install the devices properly.

5. Arcata, therefore, asked for and was granted authorization by NJB to effect a direct electrical connection of its Key System to the telephone lines further delay.

To this date I am unaware of any harm to the telephone lines or central office of NJB as a consequence of this direct connection, and have not been informed of any such harm by NJB.

WILLIAM CHRISTOPOULOS.

AFFIDAVIT

I, James R. Corry, being first duly cautioned and sworn, on oath depose and say:

1. I am Regional Manager of Arcata Communications, Inc. (hereinafter Arcata) with offices located at 1424 Westheimer, Houston, Texas. In this capacity I am responsible for the business affairs of Arcata in the greater Houston area.

2. This affidavit is submitted to show the circumstances leading to an authorized direct electrical connection of an Arcata telephone system to the telephone lines of Southwestern Bell Telephone Company (hereinafter SWB).

3. SWB & AT&T tariffs require that only the telephone company may furnish, install, and maintain connecting arrangements for the connection of customer-provided telephone equipment to telephone lines. However, on the occasion cited below, SWB failed to provide these devices in good working order.

4. On August 12, 1971, Arcata requested that SWB install twelve CDH connecting arrangements on September 1, 1971, at Powell Electric Company, 8550 Mosley Street, Houston, Texas. SWB supplied the arrangements on September 1, 1971, but one of them was defective at the time of cutover. Because SWB had no replacement devices or spare parts in available inventory it was unable to supply a functional CDH.

5. Because the customer was in need of the telephone line wired to the one faulty CDH, SWB instructed Arcata to make a direct electrical connection of its PABX equipment to SWB's telephone line. From September 1, 1971, to the present, this connection has remained in effect, as SWB has yet to replace the connecting arrangement. SWB is aware of the connection and is allowing it to remain until such time as a functional device can be acquired. Neither Arcata nor the customer is aware of any harm caused by the connection to SWB's telephone line or central office, and has not been informed of any by SWB.

JAMES R. CORRY.

AFFIDAVIT

I, Thomas A. McGowan, having been first duly cautioned and sworn, on oath depose and say:

1. I am Regional Manager for Arcata Communications, Inc. (hereinafter Arcata) with offices located at 5711 Northwest 74th Avenue, Miami, Florida. In this capacity I am responsible for the installation, maintenance, and repair of all telephone systems installed by Arcata within the greater Miami area.

2. I submit this affidavit as an attempt to demonstrate the failure and/or refusal of Southern Bell Telephone and Telegraph Company (hereinafter SBT) to provide connecting arrangements for the connection of customer-provided telephone equipment to its telephone lines as required by SBT and AT&T tariffs. Such failures and/or refusals have caused Arcata considerable embarrassment and injury to its business reputation.

3. Arcata made previous arrangements with SBT for it to install twenty CDH interface devices at Royal Caribbean Cruise Lines, 853 Biscayne Boulevard, Miami, Florida on October 29, 1971. The request was sent to SBT by Arcata three months prior to the requested date. The interfaces were supplied on that date, but all were defective and were not replaced until November 3, 1971.

4. SBT also failed to supply STC interface devices when requested at the following locations:

a. Alexander and Alexander, 515 West LeJenne Road, Miami, Florida; requested for November 6, 1970, delivered on November 30, 1970.

b. Arcata Redi Services, 2398 N.W. 119 Street, Miami, Florida; requested for September 18, 1970, delivered on January 6, 1971.

c. Atlas Metals, 1135 N.W. 159 Drive, Miami, Florida; requested for November 27, 1970, delivered on January 5, 1971.

d. Bahamia Representatives, 3000 Biscayne Boulevard, Miami, Florida; requested for October 23, 1970, delivered on October 30, 1971.

e. Bill Binko Chrysler Plymouth, 1750 North Federal Highway, Fort Lauderdale, Florida; requested for March 26, 1971, delivered on April 2, 1971.

f. Burda Metals, 201 West 23 Street, Hialeah, Florida; requested for February 5, 1971, delivered on March 1, 1971.

g. Chem-Form, 1410 S.W. Eighth Street, Pompano, Florida; requested for November 10, 1970, delivered on December 24, 1970.

h. Continental Motors, 600 West Sunrise Boulevard, Fort Lauderdale, Florida; requested for April 4, 1971, delivered on April 16, 1971.

i. Development Corporation of America, 2514 Hollywood Boulevard, Hollywood, Florida; requested for March 26, 1971, delivered on April 23, 1971.

j. Helliwell, Melrose and DeWolf, 600 Bricknell Avenue, Miami, Florida; requested for September 25, 1970, delivered on October 26, 1970.

k. Hialeah Springs Motors, 900 Hialeah Drive, Hialeah, Florida; requested for September 18, 1970, delivered on October 21, 1970.

l. Kent Furniture, 401 N.W. 71 Street, Miami, Florida; requested for January 29, 1971, delivered on February 1, 1971.

m. Mamber, Gopman, Epstein and Miles, 16890 N.E. 19 Avenue, Miami, Florida; requested for April 1, 1971, delivered on May 3, 1971.

n. Sydney Bag & Paper Company, 15959 N.W. 15 Avenue, Miami, Florida; requested for January 10, 1971, delivered on February 1, 1971.

o. Truly Nolen, 600 N.W. Seventh Avenue, Miami, Florida; requested for November 20, 1970, delivered on February 5, 1971.

5. Each of these installations was ordered three weeks prior to the request dates quoted above, and SBT had previously told Arcata that a three week delivery interval could be expected. The actual delivery intervals ranged instead from four weeks to four months, causing untold hardship on Arcata's installation schedules, and severe customer inconveniences. SBT has seldom been able to make an installation within the three weeks quoted.

Nevertheless, based on Arcata's information and belief, AT&T has a production availability of over 2,000 STC units per month supplied by independent manufacturers working under licensing and technical agreements to Western Electric. SET's failure to meet requested delivery dates, and to inventory STC units in insufficient quantities to meet demand and replacement requirements can only be regarded as a practice to control and lessen competition by making interconnect equipment so perilous to use that dissatisfied cus-

tomers will generally make known to other potential and prospective customers the discontent arising from their own experience.

THOMAS A. MCGOWAN.

AFFIDAVIT

I, Frank McAloon, being first duly cautioned and sworn, on oath depose and say:

1. I am Regional Manager of Arcata Communications, Inc. (hereinafter Arcata) with offices located at 90 Park Avenue, New York, New York. In this capacity I am responsible for the business affairs of Arcata in the greater New York City area.

2. This affidavit is submitted to show that New York Telephone Company (hereinafter NYT) pursues an inconsistent and discriminatory policy in the supply of connecting arrangements it requires for the connection of customer-provided telephone equipment to its telephone lines. On numerous occasions NYT has refused to provide connecting arrangements as requested, blaming its refusals on the strike of its C W A employees which began on July 14, 1971.

3. The instances recited below show that NYT, in fact, failed to comply with requests for connecting arrangements long before the strike began, and that while blaming the strike for its refusals, has provided connecting arrangements during the strike on a discriminatory basis.

4. Trinity Parish Church, 74 Trinity Place, New York City, contracted with Arcata for an August 9, 1971 telephone system installation. On July 12, 1971, Arcata requested NYT to install four CD6 and six CD8 connecting arrangements on August 9, 1971. NYT, however, refused the request, stating, two days before the strike began, that the devices could not be installed until after the strike by its plant employees. Because of this refusal, Arcata is currently forced to delay the installation of a \$50,000.00 telephone system, a delay now running nearly six months. In addition, the customer continues to suffer because the delay has forced it to postpone the expansion and remodeling of its offices.

5. Sloan's Supermarket, Hunts Point Market, Bronx, New York, contracted with Arcata for a July 16, 1971 installation of a telephone system. On June 21, 1971, well before the beginning of the telephone strike on July 14, 1971, Arcata requested that NYT install six CD9 connecting arrangements on July 16, 1971. Without explanation NYT refused to meet the requested delivery date, thereby effectively foreclosing Arcata from the installation of a \$10,000.00 telephone system.

6. Curry Corporation, with two locations, in Scarsdale, New York, and in Yorktown Heights, New York, contracted with Arcata for telephone systems at both sites. On August 9, 1971, after the NYT strike was in progress, Arcata requested NYT to provide twenty-one CDH, ten CD8, and three CD9 connecting arrangements for an installation date of September 10, 1971, at the Scarsdale location. On August 10, 1971, Arcata requested the same September installation date for NYT to furnish ten CDH connecting arrangements to the Yorktown Heights location. NYT refused and as of the present time, none of the devices have been provided at either location.

7. Covington Grant, Howard, Holland, Hagood and Rowan, 15 Columbus Circle, New York City, contracted with Arcata for a September 3, 1971 installation of a Nitsuko key telephone system. On July 26, 1971, after the C W A strike was in progress, Arcata requested that NYT provide eight CD9 connecting arrangements on September 3, 1971. These devices were provided by NYT on September 7, 1971, three weeks after the C W A strike began, even though NYT had previously agreed to the September 3, 1971 date.

8. DeBance Manufacturing Company, 1345 Sixth Avenue, New York City, contracted with Arcata for a July 11, 1971 installation of Nitsuko Key telephone equipment. Arcata requested NYT to provide the CD9 connecting arrangements on that date, which was prior to the C W A strike, and NYT agreed to do so. It was not until July 19, 1971, after the strike began, that NYT actually provided these devices.

9. Rapoport Printing, 195 Hudson Street, New York City, contracted with Arcata for an August 27, 1971 installation of a Nitsuko Key telephone system. On August 9, 1971, Arcata requested that NYT supply seven CD9 connecting arrangements for delivery on August 27, 1971. NYT refused, blaming the strike, and Arcata has been prevented from installing the system.

10. NYT will apparently install connecting arrangements during the strike where the system to be installed is relatively small both in terms of equipment and dollar volume of the sale involved. Based on this experience, Arcata believes there is a strong presumption that NYT uses the requirement for connecting arrangement as a means of market control to prevent any substantial competition during the period of the strike. The information in possession of Arcata indicates that NYT not only discriminates among interconnect customers, but affords preferential installation treatments to its own PABX customers. By these methods NYT has substantially deprived telephone users of service in the New York City market.

FRANK McALOON.

AFFIDAVIT

I, Thomas A. McGowan, having been first duly cautioned and sworn, on oath depose and say as follows:

1. I am Regional Plant Manager for Arcata Communications, Inc. (hereinafter Arcata) with offices located at 5711 N. W. 74 Avenue, Miami, Florida. In this capacity I am responsible for the installation, maintenance, and repair of all telephone equipment installed by Arcata in the greater Miami area.

2. This affidavit is submitted to recite instances of authorized direct electrical connection by Arcata to the telephone lines of Southern Bell Telephone and Telegraph Company (hereinafter SBT).

3. SBT is required by its tariffs to provide connecting arrangements for the connection of customer-provided telephone equipment to its telephone lines; however, upon the occasions cited below, SBT either failed to provide connecting arrangements which would function properly, or was unable to install such devices correctly. Because of these failures to meet its tariff obligations, SBT expressly authorized Arcata to effect direct electrical connections in the following instances.

4. On October 29, 1971, SBT agreed with Arcata to install twenty CDH interface devices on the premises of Royal Caribbean Lines, 853 Biscayne Boulevard, Miami, Florida. This installation had apparently been completed without trouble when, in the evening of the same day, an SBT employee entered the premises and cut off all the amphenol connectors serving the SBT telephone cable in the walls. This deliberate act not only rendered those cables useless, it also damaged several areas of the customer's wall. The SBT employee then failed to remove the cable from the wall, in effect abandoning it on the customer's premises.

5. Moreover, later that evening it was discovered that none of the 20 interface devices were functioning properly. At the time, Royal Caribbean was running a full page advertisement in Life Magazine asking holiday customers to call its Enterprise telephone number. However, because of SBT's incompetency, none of these calls could be completed to Royal Caribbean. When the situation was reported to SBT officials, they stated that the problem would be corrected as soon as possible and expressly authorized Arcata to effect a direct electrical connection to SBT's lines until the interfaces could be properly installed. This direct connection was made on October 31, 1971, and remained until Wednesday, November 3, 1971, when proper installation of the interfaces was completed. During this time Arcata observed no harm to the telephone network resulting from the direct connection, and none was reported by SBT.

6. Another instance of direct electrical connection occurred at Carrier Weathermatic Corporation, 120 N. E. 179 Street, Miami, Florida, where SBT installed defective interface devices in October, 1970. Arcata had installed an Ericsson AKD 741 PABX system on that date and found that none of the CDH connecting arrangements were functional. Because the customer was in need of its telephone service, SBT employees advised Arcata to by-pass the CDH devices and directly connect the system. Bell officials explained that the interface devices needed to correct the problem were not readily available.

7. Although this direct electrical connection remains in effect at this time, Arcata is unaware of any harm to SBT's telephone lines or central office, and has not been informed of any by SBT.

8. Although all the details concerning dates of the occurrences are not available at this time, the following are additional instances where authorized direct electrical connections have been in effect at one time or another.

(a) Massey Yardley Dodge, 1600 N. Federal Highway, Fort Lauderdale, Florida.

(b) Vespa-Honda Miami, Inc., 3112 N. W. 36 Street, Miami, Florida.

THOMAS A. MCGOWAN.

AFFIDAVIT

I, Dennis W. Landers, having been first duly cautioned and sworn, depose and say:

1. I am Regional Manager of Arcata Communications, Inc. (hereinafter Arcata) with offices located at 3037 West Clarendon, Phoenix, Arizona. In this capacity, I am responsible for the business affairs of Arcata in the Phoenix area.

2. I submit this affidavit to demonstrate the inability of Mountain States Telephone and Telegraph Company (hereinafter Mountain States) to provide the connecting arrangements necessary for the installation of customer-provided telephone equipment in a timely and business-like manner. Due to delays on its part, Mountain States has caused injury to the business reputation of Arcata and inconvenience to its customers.

3. Mountain States insists that only the telephone company may supply, install, and maintain the connecting arrangements required by its and AT&T tariffs. Nevertheless, Mountain States fails to supply and install such devices within a time frame consistent with good business practice. This failure and/or refusal results in lessening competition within Mountain States' area of operation in a manner inconsistent with the services implied or directly required under AT&T tariffs.

4. Following are several instances wherein Mountain States failed to provide the proper interface device to Arcata's customers on the dates requested.

5. For Valley Transportation and Warehouse Company, 1825 South Black Canyon Highway, Phoenix, Arizona, Arcata requested that Mountain States install nine STC devices on October 15, 1971. Mountain States stated that it did not have these devices in stock and that service could not be provided until October 22, 1971, when the installation was finally completed. Subsequent to the installation, Mountain States installation personnel refused to remove the old telephone wire for five days, and when they did remove it, the men working for Mr. Ken Stone, a foreman of Mountain States, pulled out cables that served two other customers in the same building.

6. The installation of seven STC devices was requested of Mountain States by Arcata on October 18, 1971, for Arizona Machinery Company, 2825 West Thomas, Phoenix, Arizona. Mountain States stated that it did not have the devices in stock. Arcata then requested an October 20, 1971 date, to which Mountain States made the same response. It was not until November 5, 1971 that Mountain States provided the devices.

7. Arcata requested that Mountain States install seven STC devices at Western Machinery Company, 820 North 17th Avenue, Phoenix, Arizona, on October 25, 1971. Since this fell on Veteran's Day and was a holiday for Mountain States' employees, the date was changed to October 26, 1971. Because Mountain States could not supply the interfaces, the actual date of installation was not until November 12, 1971.

8. Based on Arcata's information and belief, AT&T has a production availability of over 2000 STC devices per month supplied by independent manufacturers working under licensing and technical agreements with Western Electric. Mountain States' failure to inventory STC units in sufficient quantities to meet demand and replacement requirements can only be regarded as a practice to lessen competition by making interconnect equipment so perilous to customer use that they will generally make any dissatisfaction known to other potential customers.

DENNIS W. LANDERS.

AFFIDAVIT

I, James W. Gallaway, having first been duly cautioned and sworn, on oath depose and say:

1. I am Regional Plant Manager for Arcata Communications, Inc. (hereinafter Arcata), with offices located at 1220 West Walnut, Compton, California. In this capacity I am responsible for the installation, maintenance, and repair of all telephone equipment sold by Arcata within the greater Los Angeles area.

2. I submit this affidavit to demonstrate the delays in service Arcata and its customers have suffered because Pacific Telephone and Telegraph Company (hereinafter PT&T) could not or would not supply the connecting arrangements required by AT&T tariffs, on the dates mutually arranged for such delivery. By such actions, PT&T has both caused irreparable injury to Arcata's business reputation and customer relations, and subjected Arcata's customers to considerable inconvenience in receiving adequate service. Upon review of my records and personal experience in these incidents, I state that the following occurrences took place in the manner and on the dates set forth below.

3. Arcata arranged with PT&T for the installation on June 7, 1971 of interface devices for Ponderosa Homes, 2082 Business Center Drive, Irvine, California. On that day, Arcata was informed by PT&T that the interfaces could not be provided because they were not in stock. Arcata was not advised of this when it ordered the interfaces, and in fact has never been advised until the scheduled cutover date that PT&T lacks the devices in stock. As yet, the ordered interfaces have not been delivered.

4. Arcata requested and PT&T agreed to provide six C2ACP interface devices for a September 10, 1971 installation at Riviera Employment, 2082 Business Center Drive, Irvine, California. However, PT&T did not provide the ordered interfaces on that date, stating that the devices were not in stock. Arcata was not informed of this inability to provide the interfaces by PT&T until the scheduled cutover date.

5. BBC Laboratories, 700 Sepulveda Boulevard, El Segundo, California, contracted with Arcata for the installation of an Ericsson ARD 561 PABX system. Arcata made arrangements with PT&T for the installation on October 22, 1971 of ten CDH, one CD8, and one CD6 interface devices. However, PT&T failed to provide any interfaces on the appointed date. It was not until the week of November 8, 1971, that PT&T provided some of the ordered interface devices and, even then, two of the requested devices were not supplied. PT&T has never yet provided these two devices.

6. In the case of California Dental Service, 520 South Lafayette Park Place, Los Angeles, California, Arcata requested that PT&T install CDH interface devices on August 24, 1971. However, PT&T failed to provide the requested interfaces until two weeks after the date mutually agreed upon.

7. On November 16, 1970, Arcata installed an Ericsson AKD 741 PABX system at Fullerton Mortgage, 9055 Euclid, Fullerton, California. PT&T had agreed to install interface devices on that date, but failed to do so. It was not until two weeks later, December 1, 1970, that the devices were supplied.

8. In each of the above cited instances, Arcata personnel were forced to make additional trips to the installation site in order to re-test the system after PT&T had finally installed interfaces. The effort and expense of these additional trips would have been entirely unnecessary had PT&T complied with its tariff duty to furnish the devices upon reasonable request therefor.

JAMES W. GALLAWAY.

AFFIDAVIT

I, James W. Gallaway, having been first duly cautioned and sworn, on oath depose and say:

1. I am Regional Plant Manager for Arcata Communications, Inc. (hereinafter Arcata), with offices located at 1220 West Walnut, Compton, California. In this capacity I am responsible for the installation, maintenance, and repair of all telephone equipment sold by Arcata in the greater Los Angeles area.

2. I submit this affidavit as evidence of the failure and refusal of Pacific Telephone and Telegraph Company (hereinafter PT&T) to supply and install connecting arrangements required by them for use as an interface between its telephone lines and customer-provided telephone equipment.

3. At an Arcata installation on June 11, 1971, for the Wrather Corporation, 270 N. Canon Drive, Beverly Hills, California, PT&T insisted that it had to furnish interface devices for several of the customer's tie lines. For six months, PT&T persisted in its demand that interface devices were required, while Arcata insisted that interfaces were not required on private or tie lines. Although PT&T could not provide the interfaces it was requiring, PT&T would not allow Arcata to furnish the customer with service by direct electrical connection. The installation of the first of these lines was originally scheduled for June 11, 1971, but was not completed until the week of November 22, 1971. Another tie line was also to have been installed on June 11, 1971, but, for the

same reasons, was not completed until October 25. Both of these situations were resolved only after Arcata was able to convince PT&T that interfaces were not required on private or tie lines. It took six months of unnecessary effort by Arcata to resolve the conflict. Although there are telephone company tariffs requiring interfaces on the switched message network, the FCC has not yet authorized the telephone company to require interfaces on private lines.

4. Commercial National Security Service, Inc., 19455 Burbank Blvd., Tazana, California, was to have been placed in service by Arcata on October 22, 1971, but PT&T failed to provide four of the CDH interface devices required for outgoing service. As of this date, PT&T has not yet provided the units.

5. On February 2, 1971, Arcata was to have installed an Ericsson AKD 741 PABX at Nabors Cadillac, 2600 Harbor Boulevard, Costa Mesa, California, but could not complete the installation because PT&T failed to provide the interfaces as requested. PT&T did not provide them until two weeks later. PT&T's delays cost Arcata twenty man hours of time, in waiting around at variously scheduled delivery dates. Generally PT&T does not provide advance notice to Arcata of the fact that a scheduled interface delivery and installation date will not be met. Consequently, this fact is discovered only when Arcata installers, after waiting a reasonable time at the installation site, call into the PT&T Plant or Marketing Department.

6. These and other delays have caused embarrassment and injury to the business reputation of Arcata and have resulted in a great deal of overtime expense. None of the expense would have been necessary had PT&T provided the interface devices in a timely and businesslike fashion.

JAMES W. GALLAWAY.

AFFIDAVIT

I, James Hoffman, being first duly cautioned and sworn, on oath depose and say:

1. I am Regional Manager for Arcata Communications, Inc. (hereinafter Arcata) with offices located at 40 Brookwood Drive, N.E., Atlanta, Georgia. In this capacity, I am responsible for the business affairs of Arcata in the greater Atlanta area.

2. I submit this affidavit to show (1) the delays encountered by Arcata and its customers in obtaining adequate installation of the connecting arrangements required by the tariffs of Southern Bell Telephone Company (hereinafter Southern Bell) and AT&T and (2) delays occasioned by the failure of such interface devices to function properly. Each instance, detailed below, caused Arcata's customer to suffer extreme inconvenience and the loss of adequate telephone service while Arcata itself suffered embarrassment and injury to business reputation. In addition, Arcata thereby incurred labor time and expense that would have been unnecessary had Southern Bell adequately performed its tariff duties.

3. The first instance concerns an Arcata installation on the premises of Buck Creek Industries, Inc., 3867 Roswell Road N.E., Atlanta, Georgia, where Arcata had arranged with Southern Bell for the installation of seven STC interface devices on November 12, 1971. Mr. Edward Shields of Southern Bell confirmed this commitment with Arcata, but upon the cutover date of the Arcata telephone system, Southern Bell said it would not be able to provide the interfaces because "a quality control freeze by Western Electric had caused a delay". As of November 18, 1971, these devices had not yet been furnished.

4. After installation of an Arcata PABX system on the premises of Mitchell Motors, Inc., 350 Peachtree St., N.W., Atlanta, Georgia, on May 1, 1971, the system functioned properly until October 16, 1971, when Mitchell Motors experienced problems with one of its telephone trunks. Arcata repairmen were sent to Mitchell Motors and determined, after a thorough check of Arcata's equipment, that the Southern Bell provided CDH interface devices were malfunctioning.

5. This condition was not repaired by Southern Bell for seventeen days, during which time Mitchell Motors was completely without use of the telephone line. A conversation with Mr. Edward Shields of Southern Bell on November 2, 1971, confirmed that Southern Bell does not inventory its interface devices and must obtain them from Western Electric on an as needed basis. These items of telephone equipment are not inventoried by Southern Bell, even though they have become as much in demand as other equipment

which is inventoried. The lack of inventory causes a minimum five week delay between the time the devices are ordered by Arcata and their installation by Southern Bell.

JAMES HOFFMAN.

AFFIDAVIT

I, Stanford A. Diamond, being duly cautioned and sworn on oath, depose and say:

1. I am Regional Manager of Arcata Communications, Inc. (hereinafter Arcata), with offices located at 2800 Superior Avenue, Cleveland, Ohio. In this capacity I am responsible for the business affairs of Arcata in the greater Cleveland area.

2. I submit this affidavit to demonstrate the manner in which the practices and course of dealing of the Ohio Bell Telephone Company (hereinafter Ohio Bell) harm and otherwise injure the business reputation of Arcata by Ohio Bell's total lack of cooperation in providing the connecting arrangements required by tariff. These devices function as an interface between Ohio Bell-AT&T telephone lines and customer-provided telephone equipment. Under AT&T tariff protection, Ohio Bell operates as the sole supply source of such devices, but refuses to deal in a timely and business-like manner to afford Ohio Bell and Arcata mutual customers the best possible service.

3. Arcata ordered ten CDH interface devices from Ohio Bell on August 4, 1971, for installation on the premises of Leader Mortgage, 1500 Leader, Cleveland, Ohio. October 1, 1971 was scheduled as the installation delivery date, and Ohio Bell confirmed that this due date would be met. When the installation date arrived, Arcata was informed by Ohio Bell that it could not deliver and install the interface because it did not have its cables ready to attach to them, but would be able to install them on August 11, 1971, a delay of seven days. This forced Arcata to reschedule its work load to accommodate Ohio Bell and cause Leader Mortgage to delay its plans, unduly inconveniencing it, and causing Arcata a loss of time, rescheduling of other jobs, and a deterioration of customer relations.

STANFORD A. DIAMOND.

AFFIDAVIT

I, James R. Corry, being first duly cautioned and sworn, on oath depose and say:

1. I am Regional Manager of Arcata Communications Inc. (hereinafter Arcata) with offices located at 1424 Westheimer, Houston, Texas. In this capacity I am responsible for the business affairs of Arcata in the greater Houston area.

2. I submit this affidavit to report the failure and/or refusal of Southwestern Bell Telephone Company (hereinafter SW Bell) to supply the connecting arrangements required by SW Bell and AT&T tariffs. Its failure to produce the interfaces has injured Arcata's relations with customers, and has damaged Arcata's business reputation.

3. In order to install a TIE 1030 key system for Jobbers Service Warehouse, 1919 Washington, Houston, Texas, Arcata on September 13, 1971, ordered seven C2ACP interface devices from SW Bell for installation on September 12, 1971. SW Bell reported it was unable to provide the devices due to the high demand for them. Mr. Fritz Kloppe of SW Bell stated that Western Electric refuses to stock the devices because they are too new for data relating to their usage to have been established for determining production quotas. This statement is essentially untrue, since both AT&T and SW Bell know that Arcata's minimum national requirement for such devices ranges in the area of 400 units per month.

4. For Houston Intercontinental Bank, 16830 John F. Kennedy Blvd., Houston, Texas, Arcata had ordered six C2ACP interface devices on July 30, 1971, for installation by SW Bell on October 1, 1971. Because SW Bell did not have any C2ACP's in supply, they installed CD9 interfaces instead, but did not notify Arcata of the substitution until the day of the installation. The substituted devices do not function properly with the equipment installed.

5. SW Bell has numerous STC devices on back order, causing a continuing pattern of delays in the installation of Arcata telephone systems. Because of these delays, SW Bell is able to harass competition by delaying the installation of customer-owned and maintained telephone equipment.

JAMES R. CORRY.

AFFIDAVIT

I, Earl Nelson, having been first duly cautioned and sworn, on oath depose and say:

1. I am Regional Manager of Arcata Communications, Inc. (hereinafter Arcata) with offices located at 755 Davis Street, San Francisco, California. In this capacity I am responsible for the business affairs of Arcata in the greater San Francisco area.

2. I submit this affidavit to show the failure of Pacific Telephone and Telegraph Company (hereinafter PT&T) to provide, on dates requested by Arcata and its customers, connecting arrangements required by tariff. Arcata has sought to require PT&T to comply with its and AT&T tariffs, but has been singularly unsuccessful.

3. On July 12, 1971, Arcata requested PT&T to install CDH connecting arrangements for an August 2, 1971 installation on the premises of Grubb and Ellis, 1936 Harrison, Oakland, California. On July 16, 1971, PT&T's plant personnel went on strike and PT&T rescheduled the delivery date to August 6, 1971. This forced Arcata to reschedule its installation for that weekend and cost sixteen hours of overtime. This expense would not have been necessary but for PT&T's failure to meet its commitment.

4. Arcata requested PT&T to install CDH connecting arrangements for its August 28, 1971 installation at Royal Viking Lines, No. 1 Embarcadero Center, San Francisco. Because of construction problems at the customer's site, installation had to be delayed for two months and the CDHs were rescheduled for installation during the first week of November, 1971. PT&T did not install its equipment until November 13, 1971, and as of November 15, 1971, only one of the telephone trunk lines had been installed by PT&T. These delays cost Arcata thirty-two hours of overtime, and serious inconvenience to the customer.

5. On June 29, 1971, Arcata requested PT&T to install CDH interface devices on July 13, 1971, for an installation of telephone equipment at Ware and Freidenrich, 525 University, Palo Alto, California. This date was confirmed by PT&T, but later withdrawn when PT&T said that no devices were available in the Bay Area. PT&T said later that the CDHs had become available, but did not install them until July 30, 1971. Arcata was forced to pay two of its installers sixteen hours of overtime each in order to install the system that weekend. In addition, the customer was substantially injured and inconvenienced by a thirty-day delay in obtaining full and adequate service.

6. Arcata requested P&T to install CDH connecting arrangements on April 6, 1971 at Honig, Cooper and Harrington, 55 Francisco, San Francisco, California. This date was confirmed by PT&T, but it was not until the evening of April 9, 1971, that they were installed. Because of this delay, Arcata was forced to spend thirty-two hours of overtime to complete the installation over the weekend.

7. In each of the above instances, Arcata suffered substantial injury to business reputation, and substantial damage to its customer relations by reason of its inability to meet promised delivery and service commitments. These commitments would have been met but for PT&T's interference.

8. PT&T has refused numerous requests by Arcata for the installation of STC connecting arrangements, claiming that they are unavailable under their tariffs or on a "Special Assembly" basis. Mr. Hoarig of PT&T has stated that a tariff is pending. On October 18, 1971, Mr. Hoarig was contacted and said that he would have some "meaningful information on the devices" in about two weeks. On October 28, 1971, Mr. Hoarig said "prices for the STC will be available next week and until that time, we (Arcata) could request them on a special assembly basis". He also stated that a tariff would have been filed by that time. At this time, Arcata is still waiting for the tariff to be filed, and is still unable to obtain STC connecting arrangements required for key telephone system installations. The situation is further aggravated by the fact that Arcata is in possession of information confirming that abundant quantities of STC devices have been produced, and are currently withheld from distribution by Western Electric.

EARL NELSON.

AFFIDAVIT

I, Mark E. Gaynor, having been first duly cautioned and sworn, on oath depose and say as follows:

1. At all times recited in the instances described below, I was employed as Tariff Specialist and Telephone Company Coordinator for the Midwestern

operation of Arcata Communications, Inc., (hereinafter Arcata) located at 7366 North Lincoln Avenue, Lincolnwood, Illinois. In this capacity I was responsible for interpretation of telephone company tariffs and regulations and functioned as a liaison between Arcata, the telephone companies, and the state regulatory commissions. Upon review of my records and personal experience with the following described incidents, I state that the events described took place in the manner, and on the dates as indicated.

2. I submit this affidavit to show the inability of Illinois Bell Telephone Company (hereinafter IBT) to provide the connecting arrangements required by it for the connection of customer-provided telephone equipment to its lines. Although IBT tariffs state that only the telephone company may supply these devices, it has failed, upon the occasions cited below, to provide and install them in a timely and business-like manner. Because of the IBT delays and inability to furnish these devices, Arcat has been forced to delay the installation of many scheduled telephone systems, inconveniencing its customers, and causing severe damage to its business reputation. Following is a list of those instances in which IBT failed to deliver the connecting arrangements on previously agreed dates.

3. (a) Interface devices were originally ordered by Arcata for installation on January 13, 1971, at Guidestar Company, Inc., 740 Rush Street, Chicago, Illinois, but were not actually installed by IBT until March 1, 1971.

(b) IBT did not install the interface devices required for the cutover scheduled September 30, 1971, at Weil Pump Company, 1530 North Fremont Street, Chicago, Illinois. IBT's plant department reported it had no orders for installation although numerous letters were sent to IBT requesting the September date.

(c) On May 3, 1971, Arcata was required to spend a total of 12 additional hours at the premises of Woodfield Ford, Plum Grove and Golf Roads, Schaumburg, Illinois, because IBT did not install the CDH devices on the agreed date.

(d) Because IBT could not supply eight interface devices promised for the August 1, 1970 installation at the premises of F. E. Moran, Inc., 2265 Carlson Drive, Northbrook, Illinois, Arcata's installers were given permission by IBT to direct connect to its trunks. Arcata's trunks were quickly modified to make such a connection and the system was installed and functioned without interface devices until IBT made the interfaces available several days later. Prior to IBT furnishing the devices, Arcata found one of the IBT lines was not hunting correctly. After numerous calls to IBT, Arcata's installer contacted the Frame Foreman in the Northbrook, Illinois Central Office and he resolved the problem by 4:30 that afternoon. This IBT difficulty cost Arcata eight hours of overtime.

MARK E. GAYNOR.

AFFIDAVIT

I, Franklyn E. DeFoe, having been duly cautioned and sworn, on oath depose and say:

1. I am Regional Manager of Arcata Communications, Inc., with offices located at 2625 South Santa Fe Drive, Denver, Colorado. In this capacity I am responsible for the business affairs of Arcata Communications in the Denver area.

2. This affidavit demonstrates the intent of the Mountain States Telephone and Telegraph Company (hereinafter Mountain States) to harass and otherwise cause harm to the customers and business reputation of Arcata Communications, Inc. (hereinafter Arcata).

3. I have reviewed the record of evidence compiled by my office in regard to its dealings with Mountain States and state that the following occurrences took place in the manner and on the dates set forth below:

4. On November 10, 1971, Arcata requested Mountain States to install six STC interface devices on November 23, 1971 at the premises of Sheldon, Bayer, McLean and Glassman, a law firm and customer of Arcata's, located at 622 American National Bank Building, Denver, Colorado. On November 17, 1971, a written request for this service was delivered to Mountain States which reaffirmed the November 23, 1971 date. On the following day, November 18, 1971, a Mr. Jacobson of Mountain States informed Arcata that the earliest date the STCs could be furnished would be December 16, 1971, a total of twenty-nine days after the requested November 10, 1971 date.

5. On November 24, 1971, Arcata informed Mr. Rothmeier of Mountain States that the due date of December 16, 1971 quoted by it was not acceptable. Finally, on November 30, 1971, Mr. Mark Adamson of Arcata called Mr. Jacobson of Mountain States, and demanded a due date of December 7, 1971. He was told that Mountain States could not possibly commit to any date earlier than the December 16, 1971 date originally given. It was not until December 13, 1971, that Mountain States finally provided the STCs for Arcata.

6. On September 1, 1971, Arcata ordered seven STC connecting arrangements from Mountain States for installation on September 24, 1971, at Builders Group, Ltd., 5475 Leetsdale Drive, Denver, Colorado. On September 22, 1971, Arcata requested that Mountain States change the due date to October 15, 1971 and this was accomplished with the concurrence of Mountain States. There were then other due date changes because of construction problems at Builders' location. On November 26, 1971, Arcata again requested Mountain States to change the due date of the STCs to December 3, 1971. Mountain States agreed that this would cause no difficulties.

7. On December 3, 1971, after Mountain States had completed the installation of the STCs on the first floor of the customer's building, Mountain States chose to terminate the telephone lines for Builders Corporation on the second floor of the building, which was not part of the customer's premises. This was done despite Arcata and the customer's vehement objections. Meetings were held with Bell officials until 9:00 p.m. that evening in an attempt to obtain agreement that they would extend the telephone lines from the second to the first floor where the STCs were located, but to no avail.

8. Instead, Mountain States chose to remove the already installed STCs and to relocate them on the second floor of the building. This caused Arcata to expend an additional twenty-four hours of overtime on Saturday, December 4, 1971, to reinstall and rewire its previously installed STC devices, rather than comply with a reasonable request.

9. When Mountain States was confronted with the possibility of a law suit over this and other incidents, one of their executives, L. J. Sarriugarte, Colorado Marketing Supervisor, said "I wish you would. It would clear the air and let us know where we stand".

10. On November 26, 1971, Mountain States committed itself to a due date of December 3, 1971 for the installation of CD9 interface devices so Arcata could provide service to Bekin Van and Storage, 1955 South Valley Highway, Denver, Colorado. On December 3, 1971, Arcata's installers were present at the customer's premises to complete their installation, only to find that Mountain States had not yet installed the interface devices. Mountain States was called and Arcata was told that it would not be possible for Mountain States to install the devices on that day. The installation was rescheduled for December 8, 1971.

11. In the case of G. I. Storage and Transfer, 1140 W. Fifth Avenue, Denver, Colorado, Mountain States agreed on November 11, 1971 to install CD9 interface devices on December 6, 1971. On December 6, 1971, Arcata was present for the installation of the customer's system but found that Mountain States had not scheduled the installation for that date and could not give any reason for the omission. Mountain States then agreed to complete the installation on December 9, 1971.

12. Mountain States made a commitment to Arcata to install four STC interface devices on the premises of the American Legion Post No. 1, 4500 East Alameda, Denver, Colorado on July 30, 1971. The installation was delayed when Mountain States reported that the shipment of STCs was lost in the course of air freight delivery. A substitute shipment was subsequently lost in Ohio. The interfaces were not actually installed until September 13, 1971.

13. The following represent other customers in whose behalf interface devices were ordered from Mountain States, the installation dates requested by Arcata, and the dates upon which they were actually installed:

(a) Arcata Communications, Inc.; requested for August 27, 1971, delivered on September 18, 1971.

(b) Buehler Transfer Company, 3899 Jackson Street, Denver, Colorado; requested for August 21, 1971, delivered on October 23, 1971.

(c) Colorado Surgical Supply, 1160 E. 18 Avenue, Denver, Colorado; requested for August 21, 1971, delivered September 1, 1971.

(d) Colorado Transfer & Storage Company, 4825 Limez Street, Denver, Colorado; requested for October 18, 1971, delivered on November 5, 1971.

(e) Longmont Realty & Insurance, 512 Fourth Avenue, Longmont, Colorado; requested for September 28, 1971, delivered October 2, 1971.

(f) Mansfield Realty, 2330 South Colorado Boulevard, Denver, Colorado; requested for September 24, 1971, delivered on September 29, 1971.

(g) Placements, Inc., Suite 1830 Western Federal Savings Building, Denver, Colorado; requested for September 29, 1971, delivered on October 21, 1971.

(h) Bowers and Son Transfer Company, 2030 Blake Street, Denver, Colorado; requested for November 29, 1971, scheduled for delivery on December 3, 1971.

14. In each of the above cases, the installation dates for these Arcata customers were delayed because Mountain States could not or would not supply needed connecting arrangements. Since September 10, 1971, when a formal request was made to Mountain States for the advance stockpiling of sixty-four interfaces per month (see attached), Mountain States has failed to meet its commitment on thirteen separate occasions. In each instance, Mountain States has sought to excuse its non-delivery by stating that the delays are all caused by its inability to obtain interface devices from Western Electric.

15. Mountain States is required by its tariffs to allow the connection of customer-owned and maintained telephone equipment to its lines. Since Mountain States and its parent company, AT&T, have elected to require the use of an interface device which only they may furnish, install, and maintain, it is incumbent upon them to do so in a timely and businesslike fashion, and not to attempt to use these devices as a means of limiting competition.

FRANKLYN E. DEFOL.

ARCATA COMMUNICATIONS,
Englewood, Colo., September 10, 1971.

MARK ADAMSON,
Mountain Bell,
Rm. 1150,
930 15th St.,
Denver, Colo.

DEAR MARK: This letter is to confirm and update our telephone conversation of August 6, 1971, and September 9, 1971, concerning our estimated requirements for interconnect devices.

	September	October	November	December
STC.....	64	64	64	64
CDH.....	12	12	12	12
CD-6.....	6	6	6	

Mark, these are conservative estimates and will vary, depending on sales cycles. However, over any 2 month period, they will average out.

We are extremely concerned regarding Mountain Bell's inability to inventory these devices. It has caused customer disservice in the past. We trust the enclosed projections will correct that situation.

Sincerely yours,

ARCATA COMMUNICATIONS,
S. L. JOHNSTON,
Plant Manager.

AFFIDAVIT

I, Stanford A. Diamond, being first duly cautioned and sworn, on oath depose and say:

1. I am Regional Manager of Arcata Communications, Inc. (hereinafter Arcata) with offices located at 2800 Superior Avenue, Cleveland, Ohio. In this capacity I am responsible for the business affairs of Arcata in the greater Cleveland area.

2. I submit this affidavit to demonstrate the unwillingness of Ohio Bell Telephone Company (hereinafter Ohio Bell) to install and maintain, in proper working condition, the connecting arrangements required by ATT&T tariffs.

Ohio Bell and AT&T tariffs require that only the telephone company may furnish, install, and maintain these devices which are used for the connection of customer-provided telephone equipment to its telephone lines. Even though the devices are generally available from independent manufacturers operating under licensing and technical agreements with Western Electric or from manufacturers supplying independent telephone companies, this affidavit is submitted to show those instances in which Ohio Bell has failed to provide the equipment, knowledge, inventories, and services that would permit the proper functioning of such devices.

3. On March 3, 1971, Arcata installed an Ericsson AKD 741 PABX system at the Brown Derby, 7850 Northfield Road, Walton Hills, Ohio. Ohio Bell had previously installed nine CDH interface devices on the customer's premise for the purpose of allowing the interconnection of the customer's non-Bell telephone system to Ohio Bell telephone lines. On the day of installation, Arcata found that several of the telephone trunks were inoperable due to the improper wiring of interface devices by Ohio Bell. Several wires had a short in them, and a number of fuses in the interface cabinet had been blown. After Arcata told Ohio Bell repair personnel of the situation, telephone repairmen were still unable to locate the problem until it was pointed out to them by the Arcata installer. This incident illustrates the inexperience and inability of Ohio Bell personnel in regard to installing and repairing connecting arrangements. This situation delayed the customer's installation and caused the expenditure of three hours of overtime by Arcata.

4. Another Arcata PABX system was to be installed in July, 1971 at the premises of the Pepsi Cola Bottling Company, 3209 Chester Avenue, Cleveland, Ohio. When Arcata sought to connect its system to the interfaces, it found the leads from the connecting arrangements had been improperly terminated at the demarcation point, making the interfaces inoperative. This hindered the Arcata installation for a total of three hours and again demonstrated the inability or lack of knowledge of Ohio Bell personnel regarding these devices.

5. Marc Lance Ford, Center Ridge and Clague Roads, Westlake, Ohio, reported to Arcata on February 20, 1971 that it was able to use one of its telephone lines only on an intermittent basis. Upon Arcata's inspection, it was found that an Ohio Bell CDH interface card was failing to operate properly at all times. Ohio Bell was called, came to the customer's premises, but could not locate the problem. The same incident recurred on March 22, 1971, and upon arrival at the customer's premises, an Ohio Bell employee admitted he was unfamiliar with the device. This same lack of knowledge has been reported on many other occasions by other Ohio Bell personnel.

6. On November 13, 1971, Building Systems, Inc., 3113 Prospect Avenue, Cleveland, Ohio, called Arcata to report a problem occurring on one of its telephone lines. Upon inspection and after first verifying that the malfunction was not caused by Arcata equipment, Arcata called Ohio Bell to report the problem. Upon arrival, the Ohio Bell repairman found that a CDH interface card had failed and, after inspection, stated that the card could not be repaired. Because of a lack of replacement units, the connecting device was not replaced by Ohio Bell until November 15, 1971. During these two days, the customer suffered serious impairment of its telephone service.

7. Following are the names of Arcata customers who have experienced the failure of connecting arrangements supplied by Ohio Bell. The length of the list demonstrates that these failures occur with frequent regularity.

(a) Security Federal Savings & Loan, 1112 Euclid Avenue, Cleveland, Ohio. Failures occurred in one or more of their CDH interface devices on October 16, November 4, and November 11, 1971.

(b) CleveTrust Advisors, 1530 Investment Plaza, Cleveland, Ohio. A CDH failure was reported to Ohio Bell by Arcata on September 26, 1971.

(c) Marshall Motor Company, 6200 Mayfield Road, Mayfield Heights, Ohio. A C2A connecting arrangement failed on November 15, 1971.

(d) Judson-Brooks Company, 1241 Superior Avenue, Cleveland, Ohio. On September 7, 1971, a failure occurred in a CDH device.

(e) Midland Electric Company, 2125 Superior Avenue, Cleveland, Ohio. CDH interface devices failed on August 26 and September 2, 1971.

(f) National Engineering and Contracting Company, 12608 Alameda Drive, Strongsville, Ohio. A CDH failure occurred on November 3, 1971.

The foregoing and other such interface failures have cost Arcata and its customers time, money, and severe inconvenience. Nevertheless, at this time,

Ohio Bell persists in sending inexperienced personnel to install and repair its equipment, thus perpetuating the situation.

STANFORD A. DIAMOND.

AFFIDAVIT

I, James R. Corry, being first duly cautioned and sworn, on oath depose and say:

1. I am Regional Manager of Arcata Communications, Inc. (hereinafter Arcata) with offices located at 1424 Westheimer, Houston, Texas. In this capacity I am responsible for the business affairs of Arcata in the greater Houston area.

2. I submit this affidavit to demonstrate the failure of Southwestern Bell Telephone Company (hereinafter SW Bell) to install and maintain, in proper working condition, the connecting arrangements furnished and installed by SW Bell and AT&T as required by its tariffs.

3. SW Bell tariffs state that only the telephone company may supply, install, and maintain these devices which are used for the connection of customer-provided telephone equipment to its telephone lines. However, on numerous occasions, cited below, SW Bell has failed to provide the equipment, knowledge, or services which allow the proper functioning of these devices. By its actions, SW Bell has caused serious injury to the business reputation of Arcata and has forced Arcata to spend a great deal of time and money in an effort to correct problems solely attributable to SW Bell.

4. Upon review of my records and personal experience in these incidents, I state that the following events took place in the manner and on the dates set forth below.

5. At Arcata's offices in Houston, nine C2ACP and one CDH interface devices failed at the time of cut-over on July 14, 1971. This problem was not completely corrected by SW Bell until December 15, 1971.

6. Pitney Bowes, 7005 S. W. Freeway, Houston, Texas, had seven CDH's installed by SW Bell. At the time of cutover on July 3, 1971, Arcata found the interfaces had been improperly wired.

7. At Edward Bankers, 21 Murworth, Houston, Texas, Arcata found at the time of cutover on August 10, 1971, that six CDH interfaces were faulty. This and the preceding instances testify to either the faulty manufacture of the interface devices and/or the incompetent installation of them by SW Bell employees. SW Bell employees sent to install the devices generally admit they have never seen the devices nor have they been trained in their installation.

8. At Moncrief Lenior Manufacturing Co., 2103 Lyons Avenue, Houston, Texas, four of the SW Bell CDH interface devices failed after installation.

9. On November 19, 1971 a CDH device failed at Houston Baptist College, 7502 Fondren, Houston, Texas.

10. At Property Investment, Inc., 2370 Rice Boulevard, Houston, Texas, a CDH failed on September 23, 1971, and from that time was out of service for ten days, due to the lack of spare devices or repair parts by SW Bell. This cost the customer substantial inconvenience.

11. At the American Society of Medical Technologists, 1600 Hermann Professional Building, Houston, Texas, an STC interface device failed on September 10, 1971, and was not repaired for more than ten days due to lack of replacements by SW Bell. Arcata has been told by SW Bell that replacement parts will not be available until November 17, 1971.

12. SW Bell's excuse for the unavailability of the interfaces is that "Western Electric refuses to stock them because they are too new for usage data on production quotas to have been established". To the best of Arcata's knowledge, information and belief this statement is untrue.

JAMES R. CORRY.

AFFIDAVIT

I, Robert D. Leland, having been first duly cautioned and sworn, on oath depose and say:

1. I am Regional Plant Manager for Arcata Communications, Inc. (hereinafter Arcata) with offices located at 29563 Northwestern Highway, Southfield, Michigan. In this capacity I am responsible for the installation, maintenance, and repair of all Arcata telephone systems installed in the greater Detroit area.

2. I submit this affidavit to document the incompetence and lack of training exhibited by Michigan Bell Telephone Company (hereinafter Michigan Bell) employees with respect to the installation and repair of connecting arrangements required for the connection of customer-provided telephone equipment to Michigan Bell and AT&T telephone lines.

3. Coon Brothers Rambler, Inc., 23951 Plymouth Road, Miami, Michigan. This incident involves the Michigan Bell installation of equipment to provide off-premise telephone service. Subsequent to the furnishing of the necessary telephone lines, Arcata reported to Michigan Bell that the voice levels of the telephone company lines furnished for this service were too low. After two months, extending from August 1, 1971 to October 6, 1971, Michigan Bell finally corrected the problem, following Arcata's demonstration that the transmission levels were, in fact, too low. The problem would not have occurred had Michigan Bell properly tested its interface devices after installation.

4. In almost every installation involving the furnishing of interface devices to Arcata and its customers, Arcata has had to instruct Michigan Bell installers in the proper installation of the devices. Many Michigan Bell installers admit they have never seen the devices before attempting to install them. Because of Michigan Bell's lack of experienced personnel, Arcata has been forced to spend eighteen to twenty hours on every cutover that would normally take only four hours. The extra time is spent repairing defective installations caused by the apparent incompetence of Michigan Bell personnel.

ROBERT D. LELAND.

AFFIDAVIT

I, Gerald W. Burns, having been first duly cautioned and sworn, on oath depose and say:

1. I am Regional Manager of Arcata Communications, Inc., (hereinafter Arcata) with offices located at 2635 Eastlake Avenue East, Seattle, Washington. In this capacity, I am responsible for the business affairs of Arcata in the greater Seattle area.

2. I submit this affidavit to show that the connecting arrangements required and supplied by Pacific Northwest Bell Telephone Company (hereinafter PNB) for the connection of customer-provided telephone equipment to its telephone lines, are poor in quality and hinder, rather than aid, in the furnishing of good telephone service.

3. Arcata installed an Ericsson AKD 741 PABX telephone system on the premises of Freeway Volkswagen, Inc., 4546 Roosevelt Way, N. E., Seattle, Washington, on April 26, 1971. Arcata had previously arranged for the installation of eight CDH interface devices by PNB on the August date. Following the completion of its installation, Freeway Volkswagen reported to Arcata that calls were being lost. Freeway customers complained that when they called they heard the telephone ringing, but their calls were not answered by Freeway. Freeway had no knowledge of any calls not being answered.

4. On numerous occasions, after first making certain the problem was not caused by the Arcata PABX equipment, Arcata reported the malfunction to PNB repair personnel. In addition Arcata told PNB it had determined that the problem was caused by the fluctuation in current from the PNB Step-By-Step Central Office which caused the interface devices to malfunction on an intermittent basis. PNB, however, would not be convinced and has not yet attempted to correct the problem.

5. It should also be noted that such fluctuations in current from the Central Office would not have materially affected Freeway Volkswagen's service had it not been for the presence of the interface device in the circuit. Such fluctuations caused interface devices to completely close down the circuit serving the PABX equipment. However, where no interfaces are present, these same fluctuations cause only a minor loss in the volume of the signal received.

GERALD W. BURNS.

AFFIDAVIT

I, Thomas A. McGowan, having been first duly cautioned and sworn, on oath depose and say:

1. I am Regional Plant Manager for Arcata Communications, Inc. (hereinafter Arcata) with offices located at 5711 N. W. 74 Avenue, Miami, Florida. In this capacity I am responsible for the installation, maintenance, and repair of the telephone equipment installed by Arcata in the greater Miami area.

2. I submit this affidavit to show that Southern Bell Telephone and Telegraph Company (hereinafter SBT) has failed to comply with its tariff duty to install and maintain the connecting arrangements supplied by it.

3. SBT and AT&T tariffs require the telephone company to furnish, install, and maintain these devices, which function as an interface between its telephone lines and customer-provided telephone equipment. However, on the occasions cited below, SBT failed to provide the equipment, knowledge, and services which would have permitted these devices to function properly. In many instances, the devices were defective at the time of installation.

4. (a) *Carrier Weathermatic Corporation*, 120 N.E. 179 Street, Miami, Florida. SBT installed defective interface devices on October 1, 1970.

(b) *Associated Mortgage*, 2355 Salvedo, Coral Gables, Florida. SBT installed defective interface devices on September 15, 1970.

(c) *Real Estate Directory, Inc.*, 2398 N.W. 119 Street, Miami, Florida. SBT installed defective interface devices on January 6, 1971.

(d) *Bill Binko Chrysler Plymouth*, 1750 North Federal Highway, Fort Lauderdale, Florida. SBT installed defective interface devices on April 2, 1971.

(e) *Massey Yardley Dodge*, 1600 North Federal Highway, Fort Lauderdale, Florida. SBT installed defective interface devices on November 14, 1970.

(f) *Burda Metals*, 190 West 23 Street, Hialeah, Florida. SBT installed defective interface devices on March 1, 1971.

(g) *Chem Form*, 1410 S. W. Eighth Street, Pompano, Florida. SBT installed defective interface devices on December 24, 1970.

5. In each of the above instances, tests conducted at the installation site proved that the interface devices furnished by SBT were the source of the problem. In many cases where trouble occurred, the interface were proven faulty by making a direct electrical connection of the Arcata system to SBT's telephone lines. This having been done, the systems began to function properly. When the interfaces were again introduced into the system, the problems recurred. These test were conducted in the presence, and with the approval of SBT personnel.

THOMAS A. MCGOWAN.

AFFIDAVIT

I, Franklyn E. DeFoe, having been first duly cautioned and sworn, on oath depose any say:

1. I am Regional Manager of Arcata Communications, Inc. (hereinafter Arcata) with offices located at 2625 South Santa Fe Drive, Denver, Colorado. In this capacity I am responsible for the business affairs of Arcata in the greater Denver area.

2. This affidavit is submitted to recite those instances in which Mountain States Telephone and Telegraph Company (hereinafter Mountain States) has delivered faulty connecting arrangements to Arcata customer installations; or in the alternative, has dispatched to Arcata customer installations poorly trained and inexperienced employees unable to properly install or repair such connecting arrangements.

3. In numerous instances, interface devices supplied by Mountain States have failed to function properly at the time of installation, and/or have subsequently failed to function with any consistency. When requested to install or repair these devices, the plant personnel of Mountain States usually demonstrate an inability to perform connecting arrangement installation and repair work, due to a lack of training or inexperience. The following examples demonstrate a few of such instances.

4. At the time of the Arcata installation for American Legion Post No. 1, 4500 East Alameda, Denver, Colorado, on September 13, 1971, it took Mountain States installers two days to install four STC devices. Normal installation time should not exceed two hours. Each such device is simply mounted with wall screws, or may be positioned in a regular shelf frame. To complete installation the pack cover is removed by loosening two screws. Seven screw terminals on the printed circuit board provide the means of connection to the CO line, telephone set, and power transformer. A fifteen pin connector contained in the interface pack permits a plug connection to the transmission path and control leads of the customer equipment.

5. At the September 1, 1971 Arcata installation for Colorado Surgical, 1160 East 18 Avenue, Denver, Colorado, the Mountain States installer arrived on the customer's premises with "speaker phone" transformers rather than the ordered power supply for the interface devices.

6. Arcata made arrangements with Mountain States for the August 1, 1971 installation of connecting arrangements and telephone lines to serve its new location in a new building at 2625 South Santa Fe Drive, Denver, Colorado. Mountain States did not provide this service until September 15, 1971, forcing Arcata to stay in its temporary offices for an additional six weeks. Since it began paying rental on the new location on August 1, Arcata was forced to pay double rent on both locations for the six week period.

7. When Mountain States finally arrived at the new location to provide service, its installers mixed up the sequence of telephone lines entering the connecting arrangements, and incorrectly wired the power supply for the units. They then terminated the entire 50-pair cable, designed to serve all future occupants of the building, in Arcata's testing area. This meant that in the future, whenever another occupant of the building wanted any service changes, the Mountain States installers would have to do their preliminary work in Arcata's testing area. This would cause severe inconvenience and delay to Arcata since no work would be able to be done while Mountain States was using the area.

Normally, when service is provided to a new building, the cable is terminated on the telephone pole adjacent to the building, rather than inside one area of the building which may or may not be centrally located to the other areas. Arcata's location is on the very end of the building which they occupy.

8. At Moore Equipment, 5990 Dahlia Street, Denver, Colorado, the Mountain States installer improperly wired the customer's CDH interface device and left straps on the device, causing serious transmission interference, and inconvenience to the customer.

9. In the following instances, a number of the interface devices were defective at the time of installation, or failed shortly thereafter.

10. At Wright & McGill, 8720 East Colfax Avenue, Denver, Colorado, one CDH was defective at the August 27 cutover and one more failed shortly thereafter. Mountain States was requested to repair the devices on August 30 and 31, September 1, 2, 3, 6, 8, 13, 18, 26, and 28, 1971. On September 30, 1971, Arcata was advised by Mr. Sommerville of Mountain States that "special conditioning" would be necessary for the off-premise line served by the CDH. He quoted an October 6, 1971 due date for this work, but did not complete repairs until November 15, 1971. Arcata was forced to expend one hundred and five man-hours on the installation in excess of the time normally required. All of this inconvenience and loss was imposed by Mountain States' inefficiency and refusal to remedy its own defective work.

11. At the aforementioned American Legion installation, one STC device was defective at cutover on September 13, 1971.

12. At the aforementioned Arcata installation at Colorado Surgical, two STC devices were defective, and one more failed at a later date. All during these failures by Mountain States, the customer suffered severe inconvenience. First, because of the supply of incorrect devices at the installation, its system was not installed on the scheduled date. This forced a reallocation of its personnel and their time, resulting in the loss of many productive hours. Second, because of the failure of one of the devices on a later date, the customer suffered further inconvenience in that he was unable to fully utilize the service for which he was paying. These failures were also costly to Arcata, for it was forced to delay its initial installation until Mountain States could provide the proper equipment. Its installers, who were already on the customer's site, were forced to remain there for three unproductive hours until Mountain States returned with the proper power supply. When an interface later failed, two more hours were spent, waiting for Mountain States to respond to Arcata's call for repair.

13. At Colfax National Bank, 5901 East Colfax Avenue, Denver, Colorado, two STCs were defective at cutover on August 10, 1971, and no replacements were available. It was August 12, 1971, before the installed wires were repaired by Mountain States. Another STC failed subsequent to the cut date. Arcata spent a total of twelve hours at the customer's location, waiting for Mountain States to respond to repair calls.

14. At Crown Realty, 110 St. Paul Street, Denver, Colorado, one STC device was defective at cutover.

15. Arcata had scheduled an October 21, 1971 installation for Placements, Inc., Suite 1830, Western Federal and Savings Building, Denver, Colorado. The Bell installer arrived at 4:00 p.m. on that date and refused to work

overtime. On October 22, 1971, after Mountain States had completed its work, one of the STC devices failed and the customer would not allow completion of his cutover by Arcata until all lines were working. The cutover was again rescheduled for October 23, 1971, and completed on that date, after the STC was repaired by Mountain States. Two more STCs failed following the cutover.

16. At the aforementioned Heller Mark and Company, one STC was defective at cutover and another failed shortly thereafter.

17. At the Arcata offices' installation, two of the STCs were defective at cutover, and two more failed at a later date.

18. At the time of cutover for Buehler Transfer Company, 3899 Jackson Street, Denver, Colorado, on October 23, 1971, two STC devices were defective.

19. The instances recited above are especially aggravated because Western Electric and AT&T affiliated subsidiaries do not inform the manufacturers of STC units of defective manufacturing procedures, or of the need for taking remedial action. In addition, Western Electric does not distribute STC units to AT&T companies in quantities approximating monthly production runs of the licensed independent manufacturers. As a result, AT&T companies lack adequate inventory from which to replace defective units.

20. I believe that all of the aforementioned incidents amply demonstrate the inability of Mountain States to supply, install, and maintain the interface devices only it may provide under AT&T tariffs.

FRANKLYN E. DE FOE.

AFFIDAVIT

I, Frank McAloon, having been first duly cautioned and sworn, on oath depose and say:

1. I am Regional Manager of Arcata Communications, Inc., (hereinafter Arcata) with offices located at 90 Park Avenue, New York, New York. In this capacity I am responsible for the business affairs of Arcata in the greater New York City area.

2. This affidavit is submitted to show the failure of New York Telephone Company (hereinafter NYT) to provide fully operational connecting arrangements as required by tariffs. These tariffs state that only the telephone company may furnish, install, and maintain these devices which are used as an interface between NYT-AT&T telephone lines and customer-provided telephone equipment. NYT failed to provide functional equipment in the following instance.

3. On July 1, 1971, Arcata installed an Ericsson AWD 741 PABX system on the premises of U.S. Research and Development, 15 Columbus Circle, New York City. Shortly after Arcata and NYT had installed their equipment, the customer reported service problems. Arcata's Plant Department determined that the problems were being caused not by its equipment, but by faulty CDH connecting arrangements supplied by NYT. Accordingly, the problem was referred to the telephone company. By the time NYT repaired the faulty CDHs, the customer was seriously inconvenienced, and Arcata was forced to spend four hours labor overtime on a problem not of its making.

FRANK McALOON.

AFFIDAVIT

I, Dennis W. Landers, having been first duly cautioned and sworn, on oath depose and say:

1. I am Regional Manager of Arcata Communications, Inc. (hereinafter Arcata) with offices located at 3037 Clarendon, Phoenix, Arizona. In this capacity I am responsible for the business affairs of Arcata in the greater Phoenix area.

2. This affidavit is submitted to demonstrate the failure of Mountain States Telephone and Telegraph Company (hereinafter Mountain States) to install and maintain in proper working condition, the connecting arrangements required by AT&T tariffs.

3. Mountain States tariffs require that only the telephone company may install, and maintain these devices used for the connection of customer-provided telephone equipment to its telephone lines. Nevertheless, Mountain States frequently fails to provide the equipment, knowledge, or services which allow these devices to continue functioning properly. Consequently, by its

actions, Mountain States has caused injury to the business reputation of Arcata and the expenditure of excessive time and labor by Arcata.

4. On August 23, 1971, Climate Control Company, 2222 North Black Canyon Highway, Phoenix, Arizona, reported the failure of one of the Mountain States STC interface devices, causing one of its telephone lines to be inoperative. Mountain States was called and a repairman dispatched to care for the problems, was unable to repair it. Because it had no spare STCs, Mountain States installed two of their telephones and one line on a temporary basis for two weeks. Arcata later found that the STCs had been improperly installed by Mountain States. Because of its inability to install the STCs properly, Mountain States chose the alternative of expending additional labor and expense to provide temporary service to the customer rather than supply additional STCs.

5. At 8:00 a.m., on October 18, 1971, Kar-go International, 11298 South 56 Street, Tempe, Arizona, reported to Arcata that it could not access an outgoing telephone line. Upon arrival, Arcata found that five trunk lines were dead because of an "out of service condition" in the central office in Tempe, Arizona. It was three hours before Mr. Sam McGuire, Mr. Worbinton, and Mr. Jerry Metsker, all of the Mountain States, began responding to Arcata's call for repair service. These line failures were a continuation of the problems encountered by Arcata during this installation, for at the cutover of the system, on August 28, 1971, Mountain States had installed only one-half the connecting arrangements requested by Arcata. This resulted in the customer's being able to operate with only one-half of his Arcata system. Mountain States provided the other half for one week. This "half-and-half" arrangement caused the customer and Arcata a great deal of inconvenience. There were also numerous delays in the installation of the system, since Mountain States had originally delivered the wrong type of CDH interface units, causing a three-week delay at the outset. The CDH's were to have originally been installed on August 27, 1971, but were not fully installed until September 3, 1971.

6. An Arcata installation planned for Pearce Development Company, 260 South Hibbert, Mesa, Arizona, was scheduled by Arcata and Mountain States for June 25, 1971. Mountain States was to have installed the interface devices in the customer's second floor premises. Instead, Mountain States installed them on the first floor, forcing Arcata to lay additional cable to bring service to the second floor.

7. Finally, during the November 11, 1971 installation of interface devices for John Armer Air Conditioning Company, 2705 West Thomas Road, Phoenix, Arizona, Mountain States plant personnel cut off not only the customer's service, but the service of a different customer on the next floor of the same building.

8. Taken as a whole, these incidents demonstrate the incompetence and lack of training of Mountain States plant personnel involved in the above named accounts. It is this incompetence which hinders the operation of Mountain States' competitors in the Phoenix area.

DENNIS W. LANDERS.

AFFIDAVIT

I, James W. Gallaway, being first duly cautioned and sworn on oath, depose and say:

1. I am Regional Plant Manager for Arcata Communications, Inc. (hereinafter Arcata), with offices located at 1220 West Walnut, Compton, California. In this capacity, I am responsible for the installation, maintenance and repair of all telephone equipment sold by Arcata within the greater Los Angeles area.

2. I submit this affidavit to demonstrate the inability of Pacific Telephone and Telegraph Company (hereinafter PT&T) to install and maintain in proper working condition, the connecting arrangements required by its and AT&T's tariffs.

3. Upon review of my records and personal experience in these incidents, I state that the following occurrences took place in the manner and on the dates set forth below.

4. At an Arcata installation on the premises of Commercial National Security Service, Inc., 18455 Burbank Boulevard, Tarzana, California, a PT&T-provided CDH device failed only one day after the cutover on October 22, 1971. PT&T repair service was notified on that date, but it was not until December 10, 1971, that the unit was repaired and the customer's service restored.

5. On August 6, 1971, while installing requested interfaces on the premises of W. Ross Campbell Company, 640 Olive Street, Los Angeles, California, PT&T personnel incorrectly wired the six telephone lines which enter the interface devices. All of these lines were reversed or improperly connected and these installations prevented the customer's telephone system from functioning. The incompetence of the PT&T personnel on this occasion forced Arcata personnel to spend several hours of overtime in an effort to resolve the problem.

6. The general incompetence of PT&T's installers was again demonstrated when on October 29, 1971, one of them improperly connected CDH interface devices on the premises of Russel Heating and Air Conditioning, 15007 Oxnard, Van Nuys, California. The installer, whose name is unknown due to Bell system policy of refusing to identify its plant employees, did not test the CDH device before leaving the customer's premises, and failed to discover that he had improperly wired or "strapped" every one of the devices. He had also reversed the "tip and ring" on the interfaces. As a consequence of this incompetence Arcata personnel were forced to correct these mistakes, so that the customer would suffer no further inconvenience in obtaining full and adequate telephone service.

7. On October 28, 1971, interface devices were to be installed on the premises of Community Hospital, 2231 South Western, Los Angeles, California. However, when the PT&T installer arrived, he admitted to Arcata's employees that he had never installed one of the devices and did not know how. In addition, it was found that PT&T had supplied him with incorrect interface cards. As a result, Arcata was forced to postpone its installation until PT&T corrected its error and furnished new interface cards.

When the same PT&T installer later returned with the correct devices, Arcata personnel had to direct him in his work and help him to install the units. The lack of competency exhibited by the PT&T personnel in this case cost Arcata sixteen hours of overtime and an unhappy customer.

8. At California Dental Service, 520 South Lafayette Park Place, Los Angeles, California, PT&T finally furnished and installed the requested interface after a two-week delay. However, immediately after PT&T introduced its interfaces, problems were encountered. Only two of the customer's nine telephone trunk lines would work due to a "tip and ring" reversal at PT&T's central office. The term "Tip and Ring" is an anachronism, dating from the time of the first cord type PABX systems. It is sometimes referred to as the "A and B" wires, which are simply two telephone wires constituting the complete circuit or loop of the talking path for the transmission of a voice signal. The "tip" or "A" wire provides the ground termination for the conversation. The "ring" wire is the path over which the ringing current travels prior to the establishment of the conversation. All PABX systems are designed to utilize a ground start, the "Tip" establishing the first connection for a call. If the "tip and ring" are reversed in the telephone company central office, a connection for the initiation of a call cannot be established rendering the entire circuit useless.

When it was first asked to correct this reversal, PT&T stated that it had no one available in its central office to perform the work, and that no qualified personnel were available to retest the connection of this line at the interface once the reversal was accomplished. PT&T furnished no one until later that day.

9. On November 12, 1971, while installing a telephone system for Cunningham and Walsh, Inc., 1880 Century Park East, Los Angeles, California, Arcata's installers found that the PT&T interface panel had a shorted battery lead, which prevented it from functioning properly. In addition, the battery wires were installed on the wrong CDH unit. In order to provide the customer with the adequate service to which it was entitled, Arcata was forced to repair both mistakes.

10. On Monday morning, November 15, 1971, following the cutover, Arcata personnel found still another error. The PABX system installed by Arcata had been adapted for touch-tone. Consequently, PT&T had been asked to furnish touch-tone lines to the customer and had done so. On the day in question, however, Arcata found that two of the lines had been changed back to the dial type with a resultant loss of service by the customer. This change had been made without the knowledge or authority of either Arcata or its customer.

JAMES W. GALLAWAY.

AFFIDAVIT

I, Mark E. Gaynor, being first duly cautioned and sworn, on oath depose and say:

1. At all times recited in the instances described below, I was employed as Tariff Specialist and Telephone Company Coordinator for the Midwestern operation of Arcata Communications, Inc., located at 7366 North Lincoln Avenue, Lincolnwood, Illinois. In this capacity I was responsible for interpretation of telephone company tariffs and regulations and functioned as a liaison between Arcata, the telephone companies and the state regulatory commissions.

2. This affidavit is submitted to demonstrate the inability of Illinois Bell Telephone Company (hereinafter IBT) to install and maintain the connecting arrangements required by tariff to be supplied by it.

3. IBT and AT&T tariffs provide that only the telephone company may supply, install, and maintain connecting arrangements used as an interface between its telephone lines and customer-provided telephone equipment. However, upon the occasions cited below, IBT failed to provide the equipment, knowledge and services necessary to properly install and maintain these devices. Upon review of my records and personal experience with the following described incidents, I state that the events described took place in the manner, and on the dates indicated.

4. (a) On April 1, 1971, an Arcata installer called IBT and asked it to send someone to repair an interface malfunction which he had found at *C. W. Johnson Company*, 6138 N. Clark Street, Chicago, Illinois. He was told that IBT would be at the customer's premises within 24 hours. On the next day, April 2, 1971, the Arcata installer returned to the customer's premises to see if IBT had resolved the problem. The IBT repairman was there and said he had been there all the previous day, but could not find the source of the trouble. He said he changed the power supply for the CDH, but the trouble persisted. He then asked for and received permission from Arcata to disconnect its switchboard in an attempt to determine if the problem was coming from Arcata's power supply. Even with the Arcata switchboard disconnected, the problem remained. The repairman then left, stating he would return on Monday with a Transmission Engineer from his company.

On April 8, 1971, Arcata's installer, making a further check on the situation, found two IBT repairmen at the customer's premises checking the noise levels with their metering devices. IBT then admitted the trouble was caused by a malfunction in its CDH device and said that the Transmission Engineer, who was supposed to have arrived that morning, would now arrive sometime the next week to make further tests. During this visit, Arcata showed IBT that the ground connection from the CDH device was incorrectly connected to a pipe, and that only one screw was making a connection. When IBT reinstalled the ground, the problem disappeared.

On May 10, 1971, C. W. Johnson reported that it could not get a dial tone on one of its lines. After arriving at the customer's premises and determining that the problem was not Arcata's, the Arcata installer called IBT for service. He then spent two and one-half hours waiting in vain for IBT to appear. He then left the premises but was later called by the customer, who said that IBT had appeared and corrected its malfunction.

On May 17, 1971, the customer once again called and reported that some of its calls were being cut off and that its personnel could not make outside calls. IBT was recalled by Arcata after this problem was determined to be caused by two defective CDH cards.

(b) On August 4, 1970, the interface devices for *Northmoor Country Club*, 820 Edgewood Road, Highland Park, Illinois, were improperly installed by IBT. It was necessary for Arcata to spend three hours at this account before IBT arrived to correctly wire the ground termination for the units.

For several weeks prior to April 6, 1971, Arcata installers spent a total of three and one-half days at the Northmoor attempting to get IBT to correct a malfunction caused by faulty CDH interface devices. Generator hum was present at all times on the interfaces, causing extreme noise to degrade voice transmission.

(c) On November 5, 1970, in response to a call from the customer, Arcata found a defective CDH card at *F. E. Moran, Inc.*, 2265 Carlson Drive, Northbrook, Illinois. IBT replaced the card within 45 minutes after a repair call was made to it by Arcata.

(d) On April 19, 1971, three Arcata installers reported to the premises of *Murphy Motor Express, Inc.*, 2920 S. 19th Avenue, Broadview, Illinois, in response to a repair call placed to them. Upon inspection, it was determined that the source of the problem was the IBT interface device and IBT was called to repair it. Later that day, Mr. Ernie Gorman, a Marketing Manager for IBT, called Mr. Murphy, President of Murphy Motors, and apologized for the inconvenience IBT's interface problems had caused him.

On April 20, 1971, one day after the previous incident, an Arcata installer found, upon arrival at the customer's premises in response to the customer's call, that still another interface card had been improperly replaced by IBT.

On May 13, 1971, the customer reported that there was no dial tone on its ninth level or outgoing trunks. At 11:50 a.m., after Arcata had placed a repair call to IBT, the Arcata installer was told that a repairman would be sent to the customer's premises later that day. At 3:30 p.m., IBT repairmen had not yet arrived, and the Arcata installer called Mr. George Coulton, IBT Repair Foreman, who told him IBT would be there before 8:00 that evening. Arcata's installer then left the premises. The following day, at 9:15 a.m., after learning that IBT had still failed to respond, Arcata's installer again called IBT. He was told that a man would be sent out before noon. Three days later, at 8:30 a.m. on May 17, Arcata's installer, after a check of the customer's equipment, again called IBT because the trouble had not yet been satisfactorily repaired. The customer still had no dial tone, and no incoming calls could be answered. At 9:45 that morning, the Arcata installer once again called IBT and talked to Mr. Coulton, who said his personnel had found a faulty booster in the IBT Bellwood Central Office. Arcata's installer informed him that at that time, none of the customer's lines were operative. It was not until the following day, May 18, that IBT arrived at the customer's premises early in the morning and corrected the problem.

On June 11, 1971, in response to another call from the customer, Arcata installers found a faulty card in the CDH interface device. IBT was called and the problem was resolved that afternoon.

(e) On June 29, 1971, *Borg, Inc.*, 1616 W. 63rd Street, Chicago, Illinois, reported trouble on its Chicago Foreign Exchange lines. Upon inspection by Arcata, the problem was traced to the IBT Central Office cable and interface devices.

On June 11, 1971, the customer reported that two of its lines were not working. Arcata traced the problem to IBT's Central Office.

(f) At 4:00 p.m., on Friday, May 14, IBT was to have converted its trunks from loop start to ground start, so that Arcata could install its PABX at *Guidestar Company*, 740 Rush Street, Chicago, Illinois. At approximately 6:00 p.m. on May 13, and without notifying Arcata, IBT switched the lines from loop to ground start, in spite of the fact that it had previously said that it could not make the changes in its Central Office until May 14. It was not until 8:00 p.m. that evening that IBT corrected its mistake. This premature change of the type of lines required made it impossible for Arcata to continue the installation it had started, which was predicated on the assumption that IBT would not make its change until later.

(g) On November 30, 1970, responding to a repair call from *American Envelope Company*, 4400 W. Ohio Street, Chicago, Illinois, an Arcata installer found that he could not get a dial tone from the IBT Central Office. IBT repair was called but did not arrive at the customer's premise until 4:00 that afternoon. Tests were made by Arcata and IBT but there was no improvement in transmission and it was not until the Arcata installer checked the leads going to the IBT interface devices from the Arcata equipment that it was learned that the CS lead had been moved by IBT and was causing the transmission problem. Repairs were made and the problem ceased.

(h) On February 18, 1971, Arcata installers spent seven hours at *Westenhoff and Novick*, 222 W. Adams Street, Chicago, Illinois, due to an IBT interface failure. It was determined that a blown fuse in the device was causing the malfunction. In addition, the device had been improperly grounded and the IBT installer had transposed two Arcata wires on the CDH interface block.

(i) At the February 5, 1971, installation of a telephone system for *Warren's Turf Nursery, Inc.*, 8400 W. 11th Street, Palos Park, Illinois, Arcata found that IBT had installed the wrong interface devices. It had provided loop start interfaces rather than ground start. At 10:45 that morning, Mr. O'Connell, IBT's coordinator, was asked to send someone to repair the problem and he

said IBT would be there within 30 minutes. Two Arcata repairmen were on the customer's premises at 11:45 a.m., but IBT did not appear until 2:15 p.m.

(j) On June 18, 1971, in response to a repair call, an Arcata installer found that the ground straps from the IBT interface at *Woodfield Ford*, Plum Grove and Golf Roads, Schaumburg, Illinois, were improperly grounded, causing poor transmission. IBT was called to repair the problem.

(k) On April 13, 1971, Mr. John Barbour, Area Vice President of Arcata at that time, ordered Arcata's installation personnel to clear up a transmission problem at *Precision Paper Tube Company*, 1033 N. Noel Avenue, Wheeling, Illinois, caused by malfunctioning interfaces, but the problems were not able to be corrected until May 5, 1971. In the interim IBT had been contacted and told its interface devices were malfunctioning. There was constant noise and humming on the lines which became so bad that IBT removed the CDH and temporarily wired the Arcata switchboard directly to its lines. When the CDHs were reinserted by IBT several days later, the noise reappeared. It was not until the aforementioned May 5, that Arcata's installer, Mr. Lester Cain, was able to prove to Illinois Bell that strapping option E-7 was incorrectly wired to E-8. On his suggestion, IBT changed the strapping option to E-9 and the hum disappeared. This same strapping problem also occurred at other accounts such as Murphy Motors and C. W. Johnson, and the same change caused the transmission quality to improve greatly.

(l) On May 19, 1971, *Fitch, Egan, Tappan & Luedeka*, 135 South LaSalle Street, Chicago, Illinois, found it could not get a dial tone on one of its lines. Upon arrival, Arcata determined that this problem was caused by a defective CDH card in the IBT interface device. IBT caused additional problems on May 20 and May 21 when, in attempting to repair its CDH cards, it loosened equipment in Arcata's PABX.

(m) On April 7, 1971, Arcata's installer was called to *Applegate Leason*, 535 N. Michigan Avenue, Chicago, Illinois, and upon arrival learned of the failure of an IBT CDH device. No dial tone was evident on the outgoing lines. IBT was called but did not repair the malfunction until the following day.

(n) On December 1, 1970, Albert Chavoan, an Arcata installer, was informed of a problem at *Corbett Clinic*, 1380 Lake Street, Chicago, Illinois. The customer reported that two of its outgoing trunks had no dial tone. At 10:15 a.m., Mr. Chavoan called IBT and talked to Test Desk Foreman, Mr. Boyle, who said he would have the PBX Foreman call Mr. Chavoan, since it was his problem. At 11:30 a.m., after waiting for IBT's call, Mr. Chavoan called Bill Dietz, the PBX Foreman, who told Mr. Chavoan to call a Mr. Haggerty. Mr. Chavoan called Mr. Haggerty and gave him the IBT order number used for this installation. He was then told that this was a problem for the Repair Department. At 11:45 a.m. Mr. Chavoan called Mr. Boyle once again, and gave him the information he had received from Mr. Haggerty. Mr. Boyle said he would give this information back to the Central Office Tester and call back in a few minutes.

At 12:45 p.m., Mr. Boyle called Mr. Chavoan and said that lines were "open" to the Central Office. He said the Frame Foreman was working on it, and that he would call back when the situation was corrected. At 2:30 p.m., Mr. Chavoan again called Mr. Boyle and said that the line still was not working. At 4:00 p.m., Mr. Chavoan called Mr. Boyle once more, and was told that Mr. Boyle was gone for the day, but that IBT was still working on the problem. At 4:30 p.m., Mr. Moisan of Arcata called IBT and was told repairs were 90% completed. At 5:00, the lines were finally repaired.

On April 10, 1971, the same customer called Arcata to report a "squeak" in the first trunk, and that in addition, there was no dial tone. That afternoon, after first verifying that Arcata's equipment was not at fault, Arcata's installer called IBT and informed them that the trouble was in its equipment. A girl in IBT's Repair Department advised him that IBT would be at the customer's premises that afternoon. At 4:00 p.m., Arcata's installer called Corbett Clinic and was informed that IBT had called and said the trouble was not caused by IBT equipment and that IBT was not coming out to repair anything.

On April 12, 1971, Arcata again verified that the trouble was in the IBT equipment and called IBT. At 11:30 a.m., an IBT tester called Arcata's installer and asked him to remove Arcata's equipment from the IBT lines so that he could make tests. The results of his tests proved the problem was IBT's and our installer was told that IBT would dispatch someone to the customer's premises. On Wednesday, April 4, at 8:10 a.m., Arcata called Corbett Clinic and asked if the trouble had been repaired by Illinois Bell. The

girl at the switchboard informed him that IBT had taken care of the problem the previous day, and that everything was now functioning properly.

In each of these instances, Arcata's customers suffered considerable inconvenience and the loss of the adequate service to which they are entitled. This in turn placed a severe strain on Arcata's customer relations and caused injury to Arcata's business reputation. Moreover, in each of these instances Arcata was forced to expend money and resources in an effort to correct problems which would not have arisen had IBT adequately performed its tariff duties.

MARK E. GAYNOR.

JUNE 20, 1973.

Mr. TOM BOLGER,
President, C & P Telephone Co.,
Washington, D.C.

DEAR MR. BOLGER: Approximately one year ago, this firm purchased and had installed an independent telephone system. Since that time we have experienced several major difficulties concerning the C&P service rendered to this system's interconnect.

Most recently, the telephone lines were out of order from Wednesday, June 13, to Monday, June 18. When our system became inoperative, we called TELCOA, who immediately came to our offices and inspected the system with a DND Model 62 Interconnect Device Tester, and found the problem not to be within our system but in your lines. It was determined, at this time, that the total cause of the problem was a defective central office trunk which prohibited the system from accepting all incoming calls. C&P was notified immediately that same day, but the serviceman did not arrive until Friday morning, and then did nothing to correct the defect asserting that the problem was within our system. The repairman sent by your company admitted that he knew nothing about interfacing devices. Further, when the representative from TELCOA called to inform C&P of this problem on Wednesday, June 13, he was treated to rude, abusive and discourteous treatment at the hands of one of your employees, a Miss Kay Jong.

This firm has experienced too many problems and difficulties over the past year with C&P and their maintenance of the trunk lines to allow this situation to continue. Mr. Lipshultz, the senior partner of this firm, has called on prior occasions, and on one instance was likewise treated rudely and informed that C&P would charge some \$15.00 per hour to correct the problem. This situation must come to an end and it must do so *immediately*.

Our system was finally made operative on Monday, June 18, after your company sent a qualified person, Dennis Bailey, to correct *your* problems with the trunk line. To do this, it required some four and one-half hours of working hand in hand with the representative from TELCOA before we were able to receive incoming calls at approximately 4:50 p.m. that day.

Since our law firm sustains itself as a result of telephone service, it is difficult to measure the damages which have been done to this firm in terms of lost business, missed appointments, inadequate representation of clients due to our inability to communicate therewith, and other general conduct of the operations of a law firm. Accordingly, we demand that you furnish us credit for the six days in which our system has been inoperative, plus pay the bill of TELCOA for their time involvement when that bill is submitted to us. Additionally, I require a personal letter of apology from your company as well as a guarantee that this situation will not occur in the future.

Should you have any questions, please do not hesitate to call.

Very truly yours,

LIPSHULTZ AND HONE,
JOHN LLEWELLYN HONE.

TELECOMMUNICATIONS SYSTEMS OF AMERICA, INC.,
Memphis, Tenn., September 14, 1973.

Mr. BOB BENHAM,
One Commerce Square,
Memphis, Tenn.

DEAR BOB: Another letter for you to file for future reference.

I was just advised this date by Mr. Hal Roach, Director of Purchasing, United Inns, Inc. that the Holiday Inn, Eastex in Houston, Texas is presently holding about 40 rooms occupied by Southwestern Bell personnel. They told

the Innkeeper that they heard he was installing their own telephone system and if he did, they would probably move out.

The Innkeeper has requested we delay installation and cut-over of this system until December 15th, at which time, the Southwestern Bell personnel will have vacated the premise.

Cordially,

DAVID C. PERDUE,
President.

September 21, 1973.

To: Mr. Dave Perdue.

From: John Wilson.

Re Bell Anti Competitive Measures, John Hancock Mutual Life Insurance Co.

As per your memo of September 15, 1973. I recently had an incident which I feel fits this category.

The firm was John Hancock Mutual Life Insurance Company, located in the Third National Bank Building, Nashville, Tennessee.

We proposed a Rotary Dial Key System to Maanger Clyde F. Swift. After short deliberation he decided he would rather have a Tel Touch system. We checked with Bell as he did and were told Tel Touch out of the downtown Central Office was full and would not be available until March 1974.

Mr. Swift then called in the Bell representative and discussed it with him. The representative told him he did not believe it was available.

By this time Bernie and I had discussed the matter with John Mitchell and he advised us we could provide him with converters until such time as Tel Touch service was available. At this time Mr. Swift then had met with the Bell Representative again and had let it be known that he was going to purchase a private system. Bell then provided them with Tel Touch lines.

The original proposal is dated July 11, 1973 and Bell completed installation of the system in August 1973.

Sincerely,

JOHN B. WILSON.

PRIVATE BRANCH EXCHANGE SERVICE

II. PRIVATE BRANCH EXCHANGE SYSTEMS

A. Communications Service Package Systems

1. Additional General Regulations

a. The Telephone Company will provide subject to the availability of facilities: Communications Service Package systems, Series 200 and 300 which are an arrangement of trunks, switching equipment, attendant positions, telephone instruments and other facilities in accordance with the provisions of this Tariff.

b. The Telephone Company will determine and provide the necessary trunks, switching equipment, attendant positions, telephone instruments and other facilities as required for exchange and other services furnished by the Telephone Company. Any additional equipment or facilities required as a result of unusual seasonal business requirements or for customer-owned facilities, will be charged for on an individual case basis. When customers request additional positions beyond those required or determined by the Telephone Company, charges for such positions will be applied as set forth in accordance with the provisions of the General Exchange Tariff. The Telephone Company reserves the right to remove trunks, switching equipment, attendant positions, telephone instruments, and other facilities furnished by the Telephone Company when, in its judgment, such equipment or facilities are no longer required or necessary to provide exchange or other services furnished by the Telephone Company.

c. The following terms as used in this section shall mean:

(1) Primary Location—The customer's premises where the attendant equipment is furnished and where calls to the main listing are completed.

(2) Secondary Location—The customers' premises other than the location where the attendant equipment is located.

(3) Workable Stations—Those stations available for customer use.

d. The primary location of a customer served by switching equipment located on his premises must be in the central office area from which his listed telephone number is furnished.

e. Service furnished at secondary locations must be of the same grade and class of service as that furnished at the primary location.

f. A secondary Communications Service Package location is furnished the same calling scope as the primary location.

g. Service furnished at a secondary location will be provided under the same provisions of service as that furnished at the primary location.

h. Secondary locations of a Communications Service Package system will be furnished only if located in the same exchange as the primary location or within exchanges or zones of a Metropolitan Area, except as provided for by Extended Area Service Arrangements as offered in this Tariff.

i. Other facilities, miscellaneous and supplemental equipment, requested by customers and not detrimental to this service or other services of the Telephone Company will be furnished in accordance with regulations and at the rates specified in the applicable sections of this Tariff.

2. Series 200—Flat Rate

The following standard features are provided with the Series 200 Communications Service Package system.

a. Attendant Position (console or switchboard), Direct outward calling, Station-to-station calling, Station hunting, Call transfer-attendant, Restriction from outgoing calls, Power failure transfer, Night service, Attendant direct station selection with busy lamp field, Attendant camp-on with indication, Attendant conference and TOUCH-TONE calling service with instruments in standard color.

	Schedule I, 1 to 4,000 total telephones		Schedule II, 4,001 to 69,999 total telephones		Schedule III, over 70,000 total telephones	
	Intercom- munication ¹	Exchange access	Intercom- munication	Exchange access	Intercom- munication	Exchange access
(b) Rates: ²						
1st 20 stations, each.....	\$15.75	\$3.25	\$15.75	\$4.75	\$15.75	\$6.25
Next 80 stations, each.....	4.75	3.25	5.25	3.25	5.25	4.75
Over 100 stations, each.....	3.75	2.25	4.25	3.25	4.25	4.75
Extensions, each.....	2.75	-----	3.00	-----	3.25	-----

¹ Addition to text.

² Change in practice.

4. Series 300—Flat Rate ^{1 2 3 4 5 6}

(a) In addition to all of the standard features provided with the Series 200 system the following additional standard features are provided with a Series 300 system: Call transfer-individual, Consultation hold. Add-on and trunk answer from any station.

	Schedule I, 1 to 4,000 total telephones		Schedule II, 4,001 to 69,999 total telephones		Schedule III, over 70,000 total telephones	
	Intercom- munication ¹	Exchange access	Intercom- munication	Exchange access	Intercom- munication	Exchange access
(b) Rates: ²						
1st 20 stations, each.....	\$16.75	\$3.25	\$16.75	\$4.75	\$16.75	\$6.25
Next 80 stations, each.....	5.75	2.25	6.25	3.25	6.25	4.75
Over 100 stations, each.....	4.75	2.25	5.25	3.25	5.25	4.75
Extensions, each.....	3.00	-----	3.25	-----	3.50	-----

¹ Addition to text.

² Change in practice.

¹ Attendant Direct Station Selection with Busy Lamp Field is provided only with consoles and applicable to first 200 stations. Requests for this service beyond 200 stations may be provided on a Special Charge Request basis, where facilities permit.

² Call transfer-individual, consultation hold and add-on will function only on an incoming call from the telecommunications network.

³ Add-on provides for a maximum of one additional station within the system and added at one time to an existing incoming call.

⁴ The minimum monthly charge is for 20 stations, per location.

⁵ The minimum charge for this service, in the event a customer changes from a Series 200 to a Series 200 Communications Service Package system, is the equivalent of the minimum * * * for a Series 300 System, starting from the date of installation.

⁶ Station hunting is limited to not more than ten stations with * * * for services above ten consecutive stations may be provided on a Special Charge Request.

j. The standard or optional features of a Communications Service Package system Series 200 and 300 may not be combined, so as to provide any features of the higher Series package at the rate of the lower Series package, nor may standard or auxiliary features of a Communications Service Feature system be combined with a Communications Service Package system.

k. Mileage charges as specified in the "Mileage" section of this Tariff apply to station lines extending outside the same building or beyond the same premises at both primary and secondary locations. Urban mileage charges for facilities extending beyond the base rate area apply at a primary location as specified in the "Mileage" section of this Tariff. Such charges do not apply to secondary locations.

l. Where a customer insists upon, and the Telephone Company agrees to provide, an arrangement of switching other than that determined by the Telephone Company, an additional one time charge will apply based upon the estimated excess costs involved.

m. Universal Tie Line Terminal rates shall apply for each tie line terminating in a Communications Service Package system.

n. Switched Service Network Terminal rates shall apply for each SCAN and CCSA type access line terminating in a Communications Service Package system.

o. No instrument change charge will be applicable on changes to a Communications Service Package system. An instrument change charge will be applicable on all changes from a Communications Service Package system to a Communications Service Feature system.

p. Directory listings are furnished under the provisions of the applicable sections of this Tariff.

q. Key Telephone Feature Systems are not available with these systems.

2. Rates and charges for Schedule I shall include exchanges with 4,000 or less total telephones in their primary calling area. Schedule II shall include exchanges with 4,001 to 69,999 total telephones in their primary calling area. Schedule III shall include exchanges with 70,000 or more total telephones in their primary calling area.

By J. R. PARSONS,
Vice President and General Manager,
Southwestern Bell Telephone Co.,
Oklahoma City, Okla.

CABANISS, JOHNSTON & GARDNER,
Birmingham, Ala., November 5, 1973.

Re Telephone Service Company of America, Inc. vs. South Central Bell Telephone Company, U.S. District Court for the Northern District of Alabama Southern Division

Mr. GERALD HELLERMAN,
Subcommittee on Antitrust and Monopoly,
Washington, D.C.

DEAR GERALD: Thank you for your letter of November 1. Enclosed pursuant to your request is a copy of our complaint against South Central Bell as well as our discovery motion.

Very truly yours,

CABANISS, JOHNSTON & GARDNER,
N. LEE COOPER.

In the United States District Court for the Northern District of Alabama
Southern Division

Civil Action No. CA 73-572

Filed in Clerk's Office, Northern District of Alabama, June 11, 1973, William E. Davis, Clerk, U.S. District Court.

TELEPHONE SERVICE COMPANY OF AMERICA, INC., PLAINTIFF
v.

SOUTH CENTRAL BELL TELEPHONE COMPANY, DEFENDANT

COMPLAINT

Telephone Service Company of America, Inc., ("TSC") plaintiff, files this civil action to obtain damages and equitable relief against South Central Bell

Telephone Company ("South Central") for violations of Sections 1 and 2 of the Sherman Act, and complains and alleges as follows:

I. JURISDICTIONAL AND VENUE

1. Jurisdiction of this action is conferred on this Court pursuant to Sections 4 and 16 of the Clayton Act, 15 U.S.C. §§15 and 26, to recover treble damages sustained by plaintiff due to violations of Sections 1 and 2 of the Sherman Act, 15 U.S.C. §§1 and 2, and for injunctive relief from said Sherman Act violations.

2. South Central maintains its principal office and place of business in Birmingham, Alabama, and accordingly, this Court is the appropriate venue for this action pursuant to Sections 4 and 12 of the Clayton Act.

II. THE PARTIES

3. The plaintiff, TSC is an Alabama corporation with its principal place of business in Birmingham, Alabama. Plaintiff is and has been actively engaged in interstate commerce by purchasing, selling, installing and servicing telephone interconnect equipment among several states.

4. The defendant, South Central, is a wholly-owned subsidiary of the American Telephone and Telegraph Company with its principal offices in Birmingham, Alabama. Defendant operates primarily in Alabama, Mississippi, Louisiana, Tennessee and Kentucky as a part of the Bell System, which includes a nation-wide system of telephone operating companies in the United States. Defendant has been actively engaged in interstate commerce by purchasing, leasing, installing, and servicing telephone equipment among the several states.

5. The telephone equipment of both plaintiff and defendant is purchased, sold and used by the respective customers in interstate commerce.

III. AVERMENTS OF VIOLATION OF THE SHERMAN ACT

6. In its decision of *Carterfone*, the Federal Communications Commission determined that A. T. and T. Co. could not monopolize the market of so-called "interconnect" equipment. Interconnect equipment is telephone equipment used in the telecommunications system and located on the premises of the user. It includes equipment such as telephone instruments, switching equipment and switchboards. Interconnect equipment is attached to telephone lines at offices, hotels, apartments, hospitals and other business establishments, and serves the function of receiving and directing incoming calls at, and transmitting outgoing calls from, such establishments. As a result of the FCC's decision in *Carterfone*, competition was established between companies such as Telephone Service Company and South Central Bell for the sale and servicing of interconnect equipment.

7. At least since February 1971, when Telephone Service Company began its competition with South Central Bell, South Central has violated Section 1 of the Sherman Act by entering into combinations involving reciprocal purchasing arrangements which respect to a substantial amount of interstate commerce, whereby South Central has purchased products and services from various potential purchasers of interconnect equipment upon the condition or understanding that they would lease the products and services of South Central, in unreasonable restraint of trade and commerce.

8. Since at least as early as February 1971, South Central, through use of its purchasing power, has violated Section 2 of the Sherman Act by attempting to monopolize the market for leasing and/or purchasing of interconnect telephone equipment by entering into reciprocal purchasing arrangements with actual and potential purchasers of such equipment.

9. At least since February 1971, when Telephone Service Company began its competition with South Central Bell, South Central has violated Section 1 and Section 2 of the Sherman Act by refusing to purchase products and services from purchasers of interconnect equipment leased from or sold by TSC even though defendant made such purchases from those interconnect customers when they were lessees of South Central.

10. Pursuant to the aforesaid combinations and attempt to monopolize, South Central has done, among other things, the following:

(a) Adopted a policy of reciprocal purchasing or purchasing from businesses who would lease from South Central;

(b) taken measures to ensure that actual and potential purchasers of interconnect equipment were aware of South Central's practice of reciprocal purchasing;

(c) discussed with actual and potential purchasers of interconnect equipment their sales and purchase position relative to South Central;

(d) caused potential purchasers of interconnect equipment to lease such equipment from South Central in reciprocation of South Central's purchases from such purchasers;

(e) leased telephone equipment to various customers upon the understanding that South Central would purchase goods and services from said purchasers;

(f) adopted a policy of refusing to deal with former lessees of South Central who are purchasers or lessees of interconnect equipment from companies other than South Central.

11. The aforesaid violations by South Central have had the following effects, among others:

(a) TSC has been foreclosed from selling or leasing in interstate commerce substantial quantities of interconnect equipment to firms that are actual or potential lessees of telephone equipment from South Central;

(b) Customers of South Central Bell telephone equipment have been foreclosed from purchasing or leasing interconnect equipment from Telephone Service Company.

12. Specifically, TSC alleges that South Central and TSC both submitted proposals for the interconnect system to be used at the Hyatt House presently being constructed in Birmingham, Alabama: that TSC's proposal was economically more attractive to the Hyatt House in all material respects, but that the Hyatt House failed to purchase interconnect equipment from TSC because of an agreement entered into with South Central Bell by which South Central Bell promised to supply the Hyatt House with free advertising and to assure that employees and visitors of South Central stay at the Hyatt House rather than other hotels and motels in the Birmingham area. In exchange for South Central's representations the Hyatt House agreed to lease telephone equipment from South Central Bell.

WHEREFORE, plaintiff prays:

1. That the aforesaid combinations between South Central Bell and purchasers of interconnect equipment involving reciprocal purchasing be adjudged and decreed to be in violation of Sections 1 and 2 of the Sherman Act.

2. That this Court award Telephone Service Company damages in the amount of five hundred thousand dollars (\$500,000) trebled pursuant to the provisions of Section 4 of the Clayton Act.

3. That the defendant, its officers, directors and agents, and all persons acting on its behalf, pursuant to the provisions of Section 16 of the Clayton Act, be perpetually enjoined from:

(a) entering into or adhering to any contract, agreement or understanding with any purchaser or potential purchaser of interconnect equipment involving reciprocal purchasing arrangements;

(b) communicating to suppliers or to potential purchasers of interconnect equipment that it will give preference to such customers if they lease equipment from South Central;

(c) utilizing purchases by South Central or any company affiliated with it to promote leases by South Central of telephone equipment;

(d) from refusing to purchase products and services from former lessees of South Central.

4. That this Court order South Central to advise all purchasers or potential purchasers of interconnect equipment, by written notice, that South Central is no longer engaged in reciprocal purchasing and to furnish a copy of the final order of this Court to all such purchasers or potential purchasers.

5. That plaintiff have such other relief as the nature of the case may require and that the Court may deem just and proper.

6. That plaintiff recover the costs for this action.

7. That its attorneys be awarded reasonable attorneys' fees.

Plaintiff demands a trial by jury in this cause.

N. LEE COOPER,
DRAYTON NABERS, Jr.,
Attorneys for Plaintiff,

Telephone Service Company of America, Inc.

FLORIDA INTERCONNECT TELEPHONE CO.,
Altamonte Springs, Fla., November 5, 1973.

Re Senator Philip A. Hart's letter on "interconnect industry."

GERALD HELLEMAN,
*Special Financial Adviser, Senate Subcommittee on Antitrust and Monopoly,
Senate Annex, Washington, D.C.*

DEAR SIR: In regard to your investigation of telephone company procedures, the following incident took place: Between February and April 1972, I engineered a telephone system for Leasehold Development Company that was to be installed in a new motel then to be known as "La Mancha" or "Everglades Inn". My position was as a sales engineer and independent broker working in association with Nelron Communications Co.

On April 13, 1972, I sold a telephone system and arranged acceptable leasing which was approved via Franklin Leasing Co., Miami, Florida. On May 3, 1972, I received a letter from Leasehold cancelling the contract. Mr. J. McCollem's explanation is attached. In addition, he was constructing a 12 story building as depicted on the stationary and that Southern Bell were future possible tenants.

The training facility mentioned in the letter is a telephone company operation and is adjacent to the motel on different property. None of the equipment listed in the attached contract was to be installed on the training facility.

It must be noted that the loss of the commission as well as the possible resultant referral sales is difficult to accept.

The motel opened this fall (1973).

I will assist you in any way possible.

Yours truly,

ALLEN W. HINGLE,
Communications Consultant.

LEASEHOLD DEVELOPMENT Co.,
May 3, 1972.

Mr. AL HINGLE,
*Nelron Communications Co.,
Fort Lauderdale, Fla.*

DEAR MR. HINGLE: I am sorry to inform you that I am going to have to cancel our order with your company.

As you know, we are building this motel and training facility for Southern Bell. I received a call today from Southern Bell's office in Atlanta asking why we were using someone else's equipment and not their's. They suggested that perhaps they had not presented their package thoroughly enough, but it was their understanding that Bell equipment would be used.

Plus you must understand that they are concerned about the fact that they are committed to us for 21,000 rooms a year for their trainees, and it would be rather embarrassing for them to be using equipment other than Bell's.

I would like to thank you for your help in this matter and also to let you know that we will be involved in other projects and hope to use your services.

Very sincerely yours,

JAMES R. MCCOLLEM.

NELRON COMMUNICATIONS CO.,
Fort Lauderdale, Fla., April 13, 1972.

(Telephone system)

Proposal submitted to: Leasehold Development Co., 6229 N. Federal Hwy., Fort Lauderdale, Fla.

Provide and install the following telephone system: OKI AC 220 A(A) 200 line, featuring—(a) three digit number translation; (b) toll restriction (dial single digit-restrict 1 or 0); (c) camp-on busy attendant; (d) class of service restriction; (e) howler tone (off-hook); (f) CDH trunk modification; and (g) remote alarm.

Basic AC 220 A(A) equipment: Attendant console; extension frame; number groups; basic frame; busy lamp field; signal generator; 14 bothway trunks; 6 outgoing trunks; 1 power supply; 152 telephone instruments; and 8 wall mount telephone instruments. Price, \$48,214.00.

Options: (a) \$6,340.00, Touch-tone; (b) \$8,768.00, Message registers, and (c) \$5,906.00 Message awaiting system.

We hereby propose to furnish labor and materials—complete in accordance with the above specifications, for the sum of: \$69,228.00 with payment to be made as follows: 1st and last three payments \$4,222.92.

ALLEN HINGLE.

ACCEPTANCE OF PROPOSAL

The above prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payment will be made as outlined above.

LEASEHOLD DEVELOPMENT CO.
JAMES A. MCCOLLEM.

NOTE: This does not include Florida State Sales Tax. Does include complete installation and one year full parts and labor maintenance, with Nelron acting as liaison between LDC and local telephone company. This proposal may be withdrawn by us if not accepted within 30 days.

CENTURY BUSINESS COMMUNICATIONS, INC.,
North Little Rock, Ark., November 7, 1973.

Mr. GERALD HELLERMAN,
*Special Financial Adviser, Senate Subcommittee on Antitrust and Monopoly,
Senate Annex, Washington, D.C.*

DEAR MR. HELLERMAN: It is very difficult, if not impossible, to document all those practices used by the Southwestern Bell Telephone Company to discourage private industries from investing in their own communications systems. I do have documentation where Bell has stipulated that the customer would not have to pay mileage charges if he were to stay with Bell and would have to pay mileage charges if he were to own his own system. This is a filed rate with the Arkansas Public Service Commission and is not a negotiable item. I also have documentation where Bell has hooked-up a customer-owned Code-A-Phone device on a Bell PBX and is not charging the customer an interface fee as is stipulated in their Public Service Commission filing. The most common Bell practice seems to be to emphasize that Bell will provide the customer an unlimited number of Central Office trunks free if they stay with the Bell system but will charge them \$32.50 a month per trunk if the customer owns his own system. One case which I can document, that is an obvious attempt at misleading the customer, is one where they indicate they are providing the customer 17 Central Office trunks for a 20 station system. He actually has ten and only needs seven. Also I have a copy of a Bell quotation where Bell will provide a customer with a deluxe 300 series PABX (again, not charging him for the trunks) for a lesser cost than he is now paying for a key system.

Bell employees have told my customers that they would not shop or spend money in my customer's places of business, and in some cases have been instructed not to go into these places of business by their superiors, but these are verbal comments and are not documented.

It may be of interest to know that of all of our cases of reported troubles 95 per cent of them have been created by the Southwestern Bell Company and eventually corrected by the Southwestern Bell Company after prodding by us. We have found it necessary to force Bell to provide our customers with acceptable levels on Central Office trunks. The acceptable line loss is approximately 5DB. In all cases the trunks my customers have received from Bell have been in the 12 to 18DB loss range which provides very poor transmission. Probably the more obvious tactic being used by Bell, which can be documented, is Bell's policy of convincing a customer that his trunk requirements are far greater than they really are, and in this way make a customer-owned system cost far more than a trunk FREE system from Bell.

Really there are so many ways that scare tactics are being used by the Southwestern Bell Company that cannot be documented that it would be impossible to list them all here, but I can provide you names of my customers whose definite impressions have been that if they were to own their own system, there would be economic reprisals by Bell.

I appreciate your investigating this obvious attempt by the Bell companies to mute competition, not by offering the customer a better or more economic system, but by tactics that make the customer afraid of leaving the protection of the Bell companies.

Cordially,

MARVIN K. HILL,
President.

CENTURY BUSINESS COMMUNICATIONS, INC.,
North Little Rock, Ark., November 16, 1973.

Mr. GERALD HELLERMAN,
*Special Financial Adviser, Senate Subcommittee on Antitrust and Monopoly,
 Senate Annex, Washington, D.C.*

DEAR MR. HELLERMAN: I am attaching six exhibits which do not cover all of my legitimate complaints concerning Bell's unfair practices, but it should be enough to give you a fair sampling of the type of competition being practiced by a monopoly against free enterprise.

Exhibit one is the number of trunks provided by a Bell customer prior to these people talking to Century Business Communications, Inc. about a system. Exhibit two shows Bell's technique in offering competition. They were supplying the customer five trunks for his twenty stations and are now supplying the customer thirteen trunks for his twenty stations plus promising the customer an additional four trunks. When you consider that the customer must pay for the trunks when he owns his own system but does not pay Bell for these same trunks on taking a Bell provided system, you can see competition is impossible. Exhibit three is a copy of a proposal Bell made in competition with Century Business Communications, Inc. whereby they have offered to supply the customer a 300 series PBX for \$6 more a month than the customer is now paying for a standard key system. Exhibit four is a copy of a Bell proposal that tells the customer that if they take the Bell proposal they will not pay mileage for their trunks but if they buy their own system, they will be billed mileage. Also in this case they are now recommending to the customer that his minimum requirements are twenty trunks where his present system is nine trunks. Exhibit five shows a Bell proposal where they are proposing ten trunks to the customer if the customer accepts the system where he must pay for the trunks, but indicated that he requires a minimum of fifteen trunks if he buys his own system. As you can see, that would alter the feasibility of the customer owning his own system by \$170 a month. I did cutover with ten trunks and they have proven adequate. Exhibit six is indicative of the harassment we encounter in trying to cooperate or coordinate our work with Bell personnel. As the letter indicates, my equipment foreman spent a full day because of Bell to accomplish what should have been a thirty minute requirement.

It is also of interest that a friend told me a couple of days ago that two Bell employees that are in his National Guard unit made reference to the fact that they (the Bell employees) could create enough problems for a person owning their own PABX that it would discourage future potential interconnect customers. His name is Joe Sutton. His office telephone number is 501 374-4814 and his home telephone number is 501 663-8801.

Mr. Johnnie Ostie of Cash Wholesale was told by a Bell employee that no Bell employees would be allowed to patronize any of the stores operated by the Cash Wholesale companies. His telephone number is 501 568-1371. By the way, he will tell you that the system in service that they have purchased far surpasses any previous arrangement they have ever had with the Bell company.

Mr. Don Pfeifer of the M M Cohn Company was told that a service assistant was not allowed to shop any M M Cohn store, and he has received in the mail correspondence from relatives of Bell employees indicating that as long as the M M Cohn Company owns their own telephone system, these people would not be doing any shopping with the M M Cohn Company.

Jerry, I could provide you considerably more detailed information if at any time you happen to be in the Little Rock area and could spend an afternoon with me and my employees. The problem is corroboration. It is obvious that all of the threats and innuendoes are designed to scare the customer but at the same time avoiding any provable evidence. I would appreciate hearing from you offering your interpretations of those items of evidence that I have attached.

Cordially,

MARVIN K. HILL,
President.

Enclosures.

NO.	EXCH	C.S.	C.S.	PBX-KEY-MULTI LINE RECORD	LIST DATE	PAGE	TELEPHONE NUMBER	EXT.		
764471	06	09	1224		NOV 09 72	001	3764471			
NR TO 41	STA NO	LTD	GN	CODE	DESCRIPTION	S	T	UNIT RATE	TOTAL RATE	ACTIVITY DATE
---MAIN LISTING---										
					JOHNSON A W CO /AIR COND					12-24-69
					EQUIP					12-24-69
					900 E MARKHAM /ICLM					12-24-69
					CLND AIR CONDITIONING EQUIP-					12-24-69
					MENT /84138/					12-24-69
---BILLING INFORMATION---										
					PO BOX 1679					12-24-69
---PBX COMMON EQUIPMENT---										
					STATION CAPACITY			NC	NC	12-24-69
					24-MO MIN CONTRACT PERIOD					12-24-69
					EXPIRATION/TERM AGREE EXP 12-					12-24-69
					24-72					12-24-69
					116 A GRAY CONSOLE			NC	NC	12-24-69
---TRUNKS---										
764471					YFC			NC	NC	11-08-72
764472					YFC			NC	NC	11-08-72
764473					YFC			NC	NC	11-08-72
764474					YFC			NC	NC	11-08-72
764475					YFC			NC	NC	11-08-72
---EQUIPMENT---										
	10				PK3GC			NC	NC	12-24-69
					9SRGX			NC	NC	08-17-70
					9SRGX			NC	NC	12-24-69
	11				PK3GC			NC	NC	08-17-70
					9SRGX			NC	NC	12-24-69
					VVV			NC	NC	12-24-69
	12				PK3GC			NC	NC	08-17-70
					3CMGX			NC	NC	08-17-70
					9SRGX			NC	NC	12-24-69
					VVV			NC	NC	12-24-69
	13				PK3GC					12-24-69
	14				PK3GC					12-24-69
	15				PK3GC					12-24-69
	16				PK3GC/DATA PHOC					12-24-69
	17				PK3GC/STATION					12-24-69

Exhibit #1
Prior to 0300

need to add one
Total 6

file
file
file

not Bell out

DATE		EACH		06 691224		PBX-KEY-MULTI LINE RECORD		NOV 05 7 002		1764411	
LINE	DATE	TIME	LTB	OR	CODE	DESCRIPTION	S	T	UNIT RATE	TOTAL RATE	ACTIVITY DATE
19					PK3GC	REC'D CLERK					12-24-7
20					PK3GC						12-24-7
					VVV				NC	NC	12-24-7
					33HGX				NC	NC	04-20-7
21					PK3GC				NC	NC	10-20-7
					33HGX						10-20-7
22					PK3GC						12-24-7
23					PK3GC						12-24-7
24					3CHGX	nt Bell out			NC	NC	12-24-7
25					PK3GC				NC	NC	12-24-7
					VVV				NC	NC	12-24-7
					33HGX				NC	NC	11-08-7
26					PK3GC	DISPLAY RM					12-24-7
27					PKY	SWB TEL CO TEST LINE			NC	NC	12-24-7
28					PK3GC	LOG ORDER DESK					10-20-7
29					PK3GC						10-20-7
30					BEC	NIGHT BELL			3	.00	10-20-7
31					PK3GC	SHIPPING					12-24-7
32					PK3GC	nt Bell out					12-24-7
33					20	EXCHANGE ACCESS CHARGE			0.20	120.00	04-08-7
					20	INTERCOMMUNICATION CHARGE			16.70	335.00	04-08-7
						T-D-T-A-L-E			23.00	460.00	
						14/REGULAR	16/OTHER	TOTAL			
						20	1	23			
WORKING STATUSES											
433 CIVV						STAYS		U.S.		MONTHLY	
						EXAMPLE		EXAMPLE		EXAMPLE	
483.15						483.15		120.00		483.15	
10.05						1390		12.50		46.45	
13.90											
12.50											
446.45										509.60	

STANDARD	UNIT	CODE	DESCRIPTION	S	T	UNIT RATE	TOTAL RATE	ACTIVITY DATE
PBX-KEY-MULTI LINE RECORD JUL 29 73 001 375 4473								
---MAIN LISTING---								
			JOHNSON A * CO /AIR COND					12-24-69
			EQPT/					12-24-69
			900 E MARKHAM /ICLR/					12-24-69
			CLMO AIR CONDITIONING EQUIP-					12-24-69
			MENT /54128/					12-24-69
---BILLING INFORMATION---								
			PO BOX 1572					12-24-69
---PBX COMMON EQUIPMENT---								
			BLM /041-4300 THRU 341-4349	3		2.50	2.50	01-02-70
			ECBX /27 STATION CAPACITY/			NC	NC	04-08-73
			ATM /DES ATTENDANT HEADSET	3		.75	.75	02-07-73
			AMPLIFIER					02-07-73
			RXX /16 A GRAY CONSOLE			NC	NC	12-24-69
---TRUNKS---								
4470			TFC			NC	NC	06-13-73
4471			TFC			NC	NC	11-08-72
4472			TFC			NC	NC	11-08-72
4473			TFC			NC	NC	11-08-72
4474			TEC			NC	NC	11-08-72
4475			TFC	2/eq		NC	NC	11-08-72
4476			TFU	out desk		NC	NC	11-08-72
			TPC			NC	NC	06-13-73
4477			TFU	out only		NC	NC	11-08-72
			TPC			NC	NC	06-13-73
4478			TFU	out only		NC	NC	11-08-72
			TPC			NC	NC	06-13-73
4479			TFU	out only		NC	NC	11-10-72
			TPC			NC	NC	06-13-73
8023			TFU	out only		NC	NC	06-13-73
8030			TFU	out only		NC	NC	06-13-73
935d			TFU	out only		NC	NC	06-13-73
---EQUIPMENT---								
10			PK3GC					12-24-69
			9CMGX			NC	NC	05-13-71
			9SRGX			NC	NC	08-17-70
11			PK3GC					12-24-69

July 9-73 Now show 17 trunks required with
13 provided. - Nov-9-72 Had 5 trunks

PBX-KEY-MULTI LINE RECORD				LIST DATE	PAGE	TELEPHONE NUMBER	EXT.
754471 09	ESR	00	091224	JUL 02 73	002	1370 4471	
LINE NO.	LD	SN	CODE	DESCRIPTION	UNIT RATE	TOTAL RATE	ACTIVITY DATE
			9SRGX		NC	NC	03-17-70
			YYY		NC	NC	12-24-69
12			PK3GC				*12-24-69
			3CMGX		NC	NC	03-17-70
			9SRGX		NC	NC	03-17-70
			YYY		NC	NC	12-24-69
13			PK3GC				*12-24-69
14			PK3GC				*12-24-69
15			PK3GC				*12-24-69
16			PK3GC/DATA PROC				*12-24-69
17			PK3GC/DUPLICATION RM				*12-24-69
18			PK3GC				*12-24-69
19			PK3GC/ACCTG CLERK				*12-24-69
			3SRGX		NC	NC	04-04-73
20			PK3DC				*12-24-69
			YYY		NC	NC	12-24-69
			3SRGX		NC	NC	04-29-72
21			PK3GC				*10-20-72
			3SRGX		NC	NC	10-20-72
22			PK3GC				*12-24-69
24			PK3GC				*12-24-69
			3CMGX		NC	NC	12-10-71
25			PK3GC				*12-24-69
			YYY		NC	NC	12-24-69
			3SRGX		NC	NC	11-08-71
26			PK3GC/DISPLAY RM				*12-24-69
29			PKT /SWB TEL CO-TEST LINE		NC	NC	*12-24-69
30			PK3GC /LOC ORDER DESK				*10-20-72
31			PK3DC				*10-20-72
			BEC		3	.65	10-20-72
32			PK3GC/SHIPPING				*12-24-69
			EXB		3	.50	01-16-73
33			PK3GC				*12-10-71
1	0	20	EXCHANGE ACCESS CHARGE		6.25	125.00	04-08-72
	0	20	INTERCOMMUNICATION CHARGE	3	16.75	335.00	04-08-72

ALLIED ARK BEARING CO.

Present Key System, 580.00 plus tax 100.00, 680.00 a month.
PBX proposal, 636.00 plus tax 50.00, 686.00 a month.

COST INFORMATION

The following rates are for your 300 Series PBX with all standard features:
Basic PBX System: PBX Switching Equipment; Console with Direct Station Selection; 36 Stations; Central Office Trunks as required; and No Key Equipment.

	Monthly	Nonrecurring
	\$636	\$30
Other service and equipment:		
Dial access to WATS	8	150
Dial access to paging	15	200
Dial access to dictation	20	
2 Magicals	20	
Total	699	380

Exhibit 4-A

COST INFORMATION

The following rates are for your 300 Series PBX with all standard features.

Basic PBX System

PBX Switching Equipment.
Console with Direct Station Selection and Busy Lamp Field.
55 PBX Stations.
Central Office Trunks as Required Including Mileage.

Other service and equipment:	Monthly charge
Dial access to paging-----	15.00
Total -----	870.00
State and Federal taxes-----	54.88
Total monthly charge-----	924.88
1-time installation charge-----	356.25

COST INFORMATION

The following charges you would continue to pay Southwestern Bell if you purchased a system from an outside supplier.

	Monthly	Installation
20 trunks at \$22.50.....	\$450.00	\$155
21 Interface services at \$6.50.....	136.50	
Touch-Tone per trunk at \$3.50.....	70.00	100
Mileage on trunks at \$0.50.....	10.00	
Total monthly charge.....	666.50	255

EXHIBIT 5-A.—CASH WHOLESALE CO., INC., PROPOSED 300 SERIES PBX

Service	Monthly	Nonrecurring
Extra listing (Sterling Stores).....	\$1.00	
Lightweight headset.....	3.50	
1st 20 stations at \$23.....	460.00	(²)
Next 80 stations at \$11.....	880.00	
Attendant's console.....	NC	
Power supply for 6-button (key) telephones.....	16.00	
13 key telephones at \$4.....	52.00	
Central office trunks (as required).....	NC	
Private business line (565-1392).....	15.00	
Miscellaneous equipment (exclusions, speakerphones).....	18.50	
Automatic dialer—Rapidial.....	10.00	
Alarm to city jail.....	12.00	
Alarm to central fire station.....	13.00	
2 paging service lines at \$15.....	30.00	\$300
Total (less tax).....	1,511.00	300
Federal tax (10 percent) on \$521.....	52.10	
State tax (3 percent) on \$1,511.....	45.33	
City pass on tax (4.33 percent) on \$1,608.43.....	69.65	
Total (with taxes).....	1,678.08	300

¹ This charge includes the cost of the PABX switching equipment and the attendant's console.

² A basic termination agreement of \$33,250 for 36 months would be applicable.

EXHIBIT 5-B.—ATTACHMENT 4

Service	Monthly	Nonrecurring
Change present system to 3-digit dialing and all main stations:		
Extra listing (Sterling Stores).....	\$1.00	
608-A switchboard.....	75.00	
3-digit power plant.....	70.00	
20 switches in equipment room at \$4 ¹	80.00	
2 paging service lines at \$3.50.....	7.00	
Lightweight headset.....	3.50	
Conference circuit.....	5.00	
3 patch cords at \$0.50.....	1.50	
10 trunks at \$22.50.....	225.00	
94 stations at \$2.75.....	258.50	\$63.75
Power supply for 6-button (key) telephones.....	16.00	
13 key telephones at \$4.....	52.00	
2 card dialers at \$3.50.....	7.00	
Private business line (565-1392).....	15.00	
Miscellaneous equipment.....	10.50	
Automatic dialer—Rapidial.....	10.00	
Recorder—connector.....	2.00	
Alarm to city jail.....	13.50	
Alarm to fire station.....	13.00	
Total.....	2 865.50	2 63.75

¹ Approximate requirement, exact number required will be determined during study of system.

² Plus tax.

EXHIBIT 5-C.—CONTINUING CHARGES TO BE PAID TO SOUTHWESTERN BELL WITH PRIVATELY OWNED SYSTEM

	Monthly	Annually	10 years
15 trunks at \$22.50.....	\$337. 50	\$4, 050. 00	\$40, 500. 00
15 interconnect arrangements at \$6.50.....	97. 50	1, 170. 00	11, 700. 00
15 trunks at \$3.50 for Touch-Tone.....	52. 50	630. 00	6, 300. 00
1 private business telephone number.....	15. 00	180. 00	1, 800. 00
2 existing alarm circuits.....	25. 00	300. 00	3, 000. 00
1 additional listing.....	1. 00	12. 00	120. 00
Federal tax (10 percent) on \$406.....	40. 60	487. 20	4, 872. 00
State tax (3 percent) on \$431.....	12. 93	155. 16	1, 551. 60
City pass on tax (4.33 percent) on \$582.03.....	25. 20	302. 40	3, 024. 00
Total.....	607. 23	7, 286. 76	72, 867. 60

EXHIBIT 5-D.—COST COMPARISON—SUMMARY

	1st year	10 years
C. B. C. system:		
Plessey equipment (includes 100 phones).....	\$58, 654. 49	¹ \$58, 654. 49
Interconnect charges (based on 15 trunks).....	7, 286. 76	72, 867. 60
Maintenance contract.....	0	² 12, 750. 00
Total.....	65, 941. 25	144, 272. 09
Bell System:		
300 series (see attached explanation for itemization of equipment).....	20, 136. 96	201, 369. 60
Total.....	20, 136. 96	201, 369. 60
Apparent net difference.....	(45, 804. 53)	57, 097. 51

¹ An additional charge of \$73 to install each phone could alter this total somewhat.

² This figure is projected on your 5-year contract of \$1,275 per year which is to be renegotiated after 5 years. It is logical to forecast that after 5 years, the contract will increase appreciably.

Exhibit 6

ITINERARY FOR NOVEMBER 8, 1973, JOHN CLOWER

7:30 A.M.—Go to Downtown M M Cohn to prewire trunks to be added by Bell.

I was to meet the Bell installer at 9:00 A.M. to check the new Central Office trunk. I missed the Bell installer, but the trunk was checked at 9:30 A.M. and was found not working. I called Bell.

The installer returned at 10:00 A.M. The line was found reversed. The installer said he could not check it, when he was there initially due to the Central Office frame not being wired. The installer prepared to leave. Upon testing the trunk we found that it would not dial touch tone. I caught the Bell installer before he left the building. Upon discussion and conference with the Central Office frame personnel we learned that group and terminal was not touch tone. The installer stated the trunk would be fixed some time that afternoon but he did not know when.

12:00 to 12:30 P.M.—Lunch.

I met Jack Ross at the University Mall approximately 12:30 P.M. He was waiting for his installer to arrive.

The installer arrived at approximately 1:00 P.M. and found the Central Office trunk not wired correctly. The trunk then had to be changed to ground start operation, which was another delay. Also, the cable pair was not patched through in the main telephone room at the Mall shopping center. After the trunk wiring was completed the line was discovered to be reversed, and the CDH card would not work. While testing the CDH card two trunks were inadvertently disconnected. One was authorized disconnected by Century Business Communications, Inc. but the wrong fuse was removed, unintentionally causing an additional trunk to be disconnected. This was corrected and tested. The new CDH card arrived and the trunk was placed in service—time 3:00 P.M.

I then returned to Downtown M M Cohn. The fourteenth trunk there was now installed by the Central Office and was put into service at 3:30 P.M. I checked the new full period line to El Dorado, but since the Bell switch cabinet was open

and no bridging clips installed, I could only assume the trunk was not in place. This information was confirmed by the PBX operator. Apparently El Dorado was having trouble getting their end installed.

It took my man a full day to accomplish an hours work because of Bell's delaying tactics.

EASTERN TELFONICS, INC.,
Harrison, N.Y., November 12, 1973.

Mr. GERALD HELLERMAN,
*Special Financial Adviser, Senate Subcommittee on Antitrust Monopoly,
Senate Annex, Washington, D.C.*

DEAR MR. HELLERMAN: Please forgive the delay on my sending you documentation with regard to Senator Hart's letter of October 29, 1973. As you can well imagine the Interconnect Industry is one which demands much time and planning, let alone the fortitude to complete with AT & T. Senator Hart is quite correct, this industry "is, to say the least, challenging".

Enclosed please find the following exhibits: (a) ETI correspondence to our prospective customer, Michael M. Rosenthal, Inc., regarding the erroneous computer analysis submitted by New York Telephone; (b) The erroneous computer analysis submitted by New York Telephone; (c) New York Telephone's letter to our prospective customer itemizing the customer's New York Telephone charges.

Please accept these documents as only a sample of the type of unfair restraint of trade tactics and retaliatory techniques being used by AT & T to thwart our selling Interconnect equipment. We have other documentations that we will be sending to you that unfortunately does not so blatantly offend one's business sense. Documentation that follows will most likely be letters that we have sent the Telephone Company with regard to inept installation of interfaces, delay of installation of Interconnect devices, and where possible, testimony from our customer of scare tactics used by the Telephone Company. As you know, the Telephone Company is very careful to avoid written commitments, and much of the abuse is too subtle to be documented.

If we may be of any further assistance to you in the near future, please do not hesitate to call on us. Thank you for your interest in furthering our mutual cause of making the Telecommunications Industry a competitive one, so that we all may compete fairly.

Very truly yours,

ANDREW J. BONEPARTH,
Executive Vice President.

EASTERN TELFONICS, INC.,
Harrison, N.Y., December 9, 1972.

Mr. LAWRENCE ROSENTHAL,
*Michael M. Rosenthal & Co., Inc.,
New Rochelle, N.Y.*

DEAR LARRY: Thank you very much for forwarding to me the documentation you received from the New York Telephone Company. I have no axe to grind with regard to the Telco letter of December 4, 1972 enumerating your "Monthly Charges Local Service," "Foreign Exchange Monthly Charges," and "Connection Charges." These are in accordance with the tariffs approved by the New York State Public Service Commission. However, I must take strong exception to the Financial Analysis the Telephone Company has submitted to you. The analysis is erroneous, misleading, and impersonal, and a shabby attempt to confuse a potential interconnect customer into believing that the perpetually high rent telephone subscribers pay for their equipment is cost justified. Therefore I will take the time to go through the analysis step by step.

First, as you requested, let me revise the ETI Proposal to include the speakerphone for \$300.00 which we failed to include in the original proposal. This changes the purchase price of your ETI System to \$3,150.00. Your lease purchase monthly payment is \$66.94. The lease payment is based on an initial term lease of 5 years at an effective interest rate of 10%. The purchase option at the end of the fifth year is 8% of the original purchase price or \$252.00, or you may continue to lease your system at a nominal annual sum of 3% of the purchase price or \$94.50 per year.

Now let us proceed to examine the Telco financial analysis:

Non-Bell equipment—Tie-Kts:

Number of years in the purchase agreement, 5. This is correct.

Monthly payments on the non-Bell equipment: \$60.56—\$66.94. The new figure reflects the cost of the speakerphone.

Monthly rate for the interconnection devices: \$69.30—\$45.31. The cost of \$69.30 given by Telco is erroneous. You have 7 interconnect devices at \$6.30/interconnect device/trunk line, or \$44.10. The figure of \$69.30 would be the cost if you had 11 interconnect devices. With tax the charge is \$46.31.

Down payment or installation charges on non-Bell equipment: \$0.00. This is correct.

Initial charges for interconnection devices: \$440.00—\$175.00. The cost of \$440.00 given by Telco is erroneous. You have 7 interconnect devices at an installation charge of \$25.00 each, or a total of \$175.00.

The system will be maintained free of cost for 12 months. This is correct.

After that time the cost per month for maintenance is: \$12.00. This is correct.

The outright purchase price of the equipment is: \$2,850.00—\$3,150.00.

The insurance rate of \$1.5/\$1000 will be used. Your own company itself is the best judge as to whether this insurance rate is consistent with your class of building and type of policy. However, as you can see we're talking about only approximately 40¢/mo. if we accept the Telco insurance rate.

For your area, the sales tax rate of 5% applies. \$157.50 Purchase—\$3.35 Lease. Since Telco's computer was incapable of coming up with the respective sales tax figures, I have for both the Outright Purchase and Lease Payment sales taxes.

Real property tax is calculated at the rate of 5.5% per \$100 of assessed value. Telco's inclusion of a real property tax corresponding to your telephone system is erroneous and a lot of nonsense. Your private telephone system stands separate from your or your landlord's property. Intercom systems, typewriters, and other office equipment are not subject to property taxes, neither is your telephone system.

Bell equipment—NYT-KTS:

The monthly rental for Bell equipment comes to: \$279.51—\$321.39. The rental of \$279.51 is without 10% Federal Tax and 5% State and Local Tax. I have included both.

Installation costs for that equipment are: \$384.13—\$403.34. I have included 5% State and Local Tax, which Telco failed to do.

It is understood that you are expecting the equipment to last 10 years.

General information:

The equipment will be depreciated expensed over a period of 5 years. Since you are financing your ETI System through a Lincoln Lease/Way lease, the depreciation would remain with the legal owner of the equipment, Lincoln Lease/Way, until such time as a purchase option is exercised or prepayments of the lease is made prior to the initial term expiration. However, accounting procedure dictates that you expense your lease payments allowing you to show a current expense before taxes. Of course, if you purchased your system outright, you would treat it just like any other capital asset, depreciating it over a period anywhere between 5 and 10 years, and taking advantage of the pretax deduction.

Your earnings rate presently is 10%. Earnings rate is many things to many people and meaningless to many to many other people if not defined correctly. I presume Telco is referring to the fact that *they* feel that 10% is a rate at which you expect a return on invested capital. It is in this light which the analysis that follows will be taken.

Your Federal tax rate is 48%.

Your State tax rate is 7%.

Your city tax rate is 0%.

The monthly rental on the trunks needed with the non-Bell equipment comes to: Same as that required for Bell Equipment.¹

An investment tax credit of 4% has been applied.—\$126.00. If you so desire, the leasing company will issue to you a letter of transmittal which in effect passes the investment tax credit on to you. Although the tax credit can be as high as 7% I have been intentionally conservative in agreeing with Telco's 4% rate, as the actual percentage is based on the type of equipment, useful life of the equipment, and some other factors.

¹ NOTE.—Central office trunk charges are common to both proposals and have been omitted from comparison.

CASH FLOW ANALYSIS—LEASE

Year	Bell	Cumulative	ETI	Cumulative	Difference ¹	Cumulative
1.....	\$922.77	\$922.77	\$570.36	\$570.36	\$352.44	\$352.44
2.....	741.26	1,664.03	678.47	1,248.83	62.79	415.23
3.....	741.26	2,405.29	678.47	1,927.30	62.79	478.02
4.....	741.26	3,146.55	678.47	2,605.77	62.79	540.81
5.....	741.26	3,887.81	678.47	3,284.24	62.79	603.60
Total.....	3,887.81	3,887.81	3,284.24	3,284.24	603.60	603.60
6.....	741.26	4,629.07	180.32	3,464.56	560.94	1,164.54
7.....	741.26	5,370.33	66.92	3,531.48	674.34	1,838.88
8.....	741.26	6,111.59	66.92	3,598.40	674.34	2,513.22
9.....	741.26	6,852.85	66.92	3,665.32	674.34	3,187.56
10.....	741.26	7,594.11	66.92	3,732.24	674.34	3,861.90
Total.....	7,594.11	7,594.11	3,732.24	3,732.24	3,861.90	3,861.90

¹ Cash flow differential in favor of ETI.

Year 1 analysis:

ETI:

Lease payment, $\$66.94 \times 12$	\$803.28
Monthly interconnect, $\$46.31 \times 12$	555.71
Interconnect installation.....	183.75
Insurance, $\$1.50 \times 3.15$	4.72
Total current expense.....	1,547.46
Tax allocation:	
Federal (48 percent).....	-742.78
State (7 percent).....	-108.32
Subtotal.....	696.36
Investment tax credit.....	-126.00
Net cash outflow after taxes.....	570.36

Bell:

Monthly rental, $\$137.27 \times 12$	1,647.24
Equipment installation.....	403.34
Total current expense.....	2,050.58
Tax allocation:	
Federal (48 percent).....	-984.27
State (7 percent).....	-105.54
Net cash outflow after taxes.....	922.77

Year 2-5 analysis:

ETI:

Lease payment, $\$66.94 \times 12$	803.28
Monthly interconnect, $\$46.31 \times 12$	555.71
Insurance, $\$1.50 \times 3.15$	4.72
Maintenance, $\$12.00 \times 12$	144.00
Total current expense.....	1,507.71
Tax allocation:	
Federal (48 percent).....	-723.70
State (7 percent).....	-105.54
Net cash flow after taxes.....	678.47

Bell:

Monthly rental $\$137.27 \times 12$	1,647.24
Total current expense.....	1,647.24
Tax allocation:	
Federal (48 percent).....	-790.68
State (7 percent).....	-115.30
Net cash flow after taxes.....	741.26

Year 6 analysis: ¹

ETI:

Insurance, \$1.50 times 3.15.....	\$4. 72
Maintenance, \$12 times 12.....	144. 00
Total current cash expense.....	148. 72
Depreciation.....	252. 00
Total current expense.....	400. 72
Tax Allocation:	
Federal (48 percent).....	—192. 32
State (7 percent).....	—28. 08
Total tax allocation.....	—220. 40
Total current cash expense.....	148. 72
Subtotal.....	—71. 68
Asset acquisition.....	252. 00
Net cash outflow after taxes.....	180. 32

Year 7-10 analysis: ¹

ETI:

Insurance, \$1.50 times 3.15.....	4. 72
Maintenance, \$12 times 12.....	144. 00
Total current expense.....	148. 72
Tax Allocation:	
Federal (48 percent).....	—71. 39
State (7 percent).....	—10. 41
Net cash outflow after taxes.....	66. 92
Bell: Net cash outflow after taxes.....	741. 26

¹ We have eliminated the monthly interconnect charge for years 6 to 10, as we sincerely believe this would be the very outside date for the long awaited ruling from the FCC to eliminate this tariff.

When Michael M. Rosenthal Co. considers obtaining communications hardware from a non-Bell System supplier, many facets of the telephone business not previously encountered become involved. The following is an illustration of some of the costs shifted to the consumer and how the overall economic picture looks in relation to a similar telephone company recommendation over the life of the equipment.

Non-Bell equipment—Tie-Kts:

Number of years in the purchase agreement, 5.
 Monthly payments on the non-Bell equipment: \$60.56.
 Monthly rate for the interconnection devices: \$69.30.
 Down payment or installation charges on non-Bell equipment: \$0.00.
 Initial charges for interconnection devices: \$440.00.
 The system will be maintained free of cost for 12 months.
 After that time, the cost per month for maintenance is: \$12.00.
 The outright purchase price of the equipment is: \$2,850.00.
 The insurance rate of \$1.5/\$1000 will be used.
 For your area, the sales tax rate of 5% applies.
 Real property tax is calculated at the rate of 5.5% per \$100 of assessed value.

Bell equipment—NYT-KTS:

The monthly rental for Bell equipment comes to: \$279.51.
 Installation costs for that equipment are: \$384.13.
 It is understood that you are expecting the equipment to last 10 years.

General information:

The equipment will be depreciated over a period of 5 years.
 Your earnings rate presently is 10%.

Your Federal tax rate currently is 48%.

Your State tax rate currently is 7%.

Your city tax rate currently is 0%.

The monthly rental on the trunks needed with the non-Bell equipment comes to: \$138.76.

An investment credit of 4% has been applied.

I certainly hope this new Cash Flow will help clarify matters for you. I have also enclosed a new proposal for you. I feel you should now have sufficient information on which to base a decision. I believe a choice of having the Telephone Company install their equipment would be most unwise. You would be billed for the initial installation at \$403.34, and I am sure you would later come to the realization that the Bell equipment is far inferior to ETI equipment, more costly, and that Telco could not possibly give you the personal, customized service you can get from ETI.

Again, if there is anything you feel you would care to have clarified, please do not hesitate to call me.

Very truly yours,

ANDREW J. BONEPARTH.

Enclosure.

The following is an analysis of both the Bell and non-Bell proposals. Negative figures indicate a savings.

SUMMARY FOR 1ST 5 YEARS

Year	Bell	Cumulative	Non-Bell	Cumulative
1.....	2,060	2,060	1,828.46	1,828.46
2.....	1,660	3,720	1,740.00	3,568.46
3.....	1,660	5,380	1,770.00	5,338.46
4.....	1,660	7,040	1,800.00	7,138.46
5.....	1,660	8,700	2,060.00	9,198.46

The Bell advantage (after taxes) is.....	\$498.46
The present value of the Bell cash flow is.....	6,690.00
The present value of the non-Bell cash flow is.....	6,972.46
The Bell advantage in the present value is.....	282.46

SUMMARY FOR NEXT 5 YEARS

Year	Bell	Cumulative	Non-Bell	Cumulative
6.....	1,700	10,400	1,420	10,618.46
7.....	1,700	12,100	1,420	12,038.46
8.....	1,700	13,800	1,420	13,458.46
9.....	1,700	15,500	1,420	14,878.46
10.....	1,700	17,200	1,420	16,298.46

The non-Bell advantage (after taxes) is.....	\$901.54
The present value of the Bell cash flow is.....	10,690.00
The present value of the non-Bell cash flow is.....	10,312.46
The non-Bell advantage in the present value is.....	377.54

The advantage after 10 years equates to a monthly savings of \$4.71 at your earnings rate of 10%.

A non-Bell advantage of \$2,301.54 exists after 15 years. This equates to a savings for Rosenthal Michael M. Co. of \$12.79 per month. At your earnings rate, this savings equates to \$6.04 per month.

The crossover point is at 0 years 0 months.

The crossover point is at 3 years 4 months.

The crossover point is at 6 years 9 months.

NOTE.—Central office trunk charges common to both proposals have been omitted from this comparison.

NEW YORK TELEPHONE,

15 South 5th Avenue, Mount Vernon, N.Y., December 4, 1972.

MICHAEL M. ROSENTHAL CO.

New Rochelle, New York.

DEAR MR. ROSENTHAL: Listed below is an itemization of your monthly charges plus connection charges for straight message business service due to go in 12-28-72. Also included is your foreign exchange service due in at the same date:

Monthly charges local service:

Individual message business line.....	\$8. 68
3 auxiliary lines at \$5.81 each.....	17. 43
4 key chiefs at \$11.06.....	44. 24
2 call directors at \$15.37.....	30. 74
1 speakerphone.....	9. 22
6 relays at \$4.31 each.....	25. 86
Dial select intercom system.....	7. 08
Buzzers at \$0.37 each.....	2. 22

Total.....	145. 47
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Foreign exchange monthly charges:

Individual message business line.....	9. 77
2 auxiliary lines at \$5.81 each.....	11. 62
Foreign mileage on 3 lines at \$37.55.....	112. 65

Total.....	134. 04
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Monthly total of \$279.51 does not include Federal, State or local tax.

Connection charges:

4 keychiefs at \$33.23 each.....	132. 92
2 call directors at \$66.46 each.....	132. 92
1 speakerphone.....	15. 00
Relays at \$15 per line.....	90. 00
Dial select intercom.....	13. 29

Total.....	384. 13
------------	---------

If you have any further questions, please feel free to call me on 664-8752.
Very truly yours,

R. MAC NEIL,
Communications Consultant.

TELERENT LEASING CORP.,
TELECOMMUNICATIONS DIVISION,
Raleigh, N.C., November 14, 1973.

Re your letter of October 29, 1973.

Mr. GERALD HELLERMAN,

Special Financial Advisor, Senate Subcommittee on Anti-Trust and Monopoly,
Senate Annex, Washington, D.C.

DEAR MR. HELLERMAN: Telerent as a small telephone interconnect company certainly appreciates Senator Hart's interest in our fight for survival in this new industry.

Telerent like most interconnect companies has seen cases of economic pressure on potential customers by the common carrier and other items which fit into the categories mentioned in Senator Hart's October 29th letter. However, we find it very difficult to acquire written proof.

For instance one potential customer was on the verge of signing a contract with Telerent for an ITT PABX. This potential customer (Helmold Motor Company) is an automobile agency with a need for good telephone communications. I was told by their general manager that they would have to hold off on making a final decision on the telephone system because the owner of the business had received several telephone calls from Southern Bell employees asking this question, "Do you realize we (Southern Bell) purchased sixty

trucks from you this last year?" I was also told that it was mentioned to the owner that he was also servicing these vehicles. Since that time a new Southern Bell system has been installed in this location. I can certainly realize the reluctance of this customer to sign an affidavit confirming these conversations with Southern Bell's employees. Since Mr. Helmold felt he could not leave Bell because of their attitude when they found out he was considering a Tele-rent system, I do not feel he would be willing to give testimony against them now.

We have also seen other indications of possible economic pressure by the telephone companies. However, the case sighted previously is one which I know of personally and was directly involved in.

On November 27th of this month, our North Carolina Utilities Commission is hearing a rate increase request by Southern Bell. At the same time they have agreed to listen to an objection by the interconnect companies of North Carolina to their allowing Southern Bell to file a 770A tariff without a hearing. The filing of this tariff in North Carolina for a period of time just about stopped all PABX sales. Before it was passed, attorneys for Litton Industries wrote the Commission a lengthy letter along with several pages of evidence showing the proposed 770A rates are not compensatory and would cause an undue burden on the residential and small business customer. Litton in this letter to the North Carolina Utilities Commission asked that the proposed rates be suspended pending a hearing to determine whether they meet the requirement that they be just and reasonable. The Commission passed the rates without holding such hearing.

The truth of Litton's letter is being shown in the pending rate case. Southern Bell is asking for sizeable rate increases on non-competitive items such as business lines, PBX trunks, message rate trunks, etc. At the same time they are asking for rate reductions on the equipment which interconnect companies find to be competitive. An example of this is they are asking to reduce the monthly charge for a ten-button Call Director from \$9.00 to \$6.60 a month. This \$2.40 a month reduction amounts to 27 percent. Southern Bell is asking for a \$44.00 installation for a home single-line telephone while their filed 770A installation charge for a 40-line PBX is only \$100.00.

Your guidance would be appreciated as to what form we should put our evidence which we feel is anti-trust or monopoly.

Thank you again for your interest.

Yours very truly,

LEON C. LIFSEY,
Vice President.

AUSTEL, AUSTIN TELEPHONE Co.,
A SUBSIDIARY OF THE SANTEL GROUP,
November 15, 1973.

Memorandum to Gerald Hellerman, Special Financial Adviser, Senate Subcommittee on Antitrust and Monopoly:

Re Unfair Business Practices Exercised by Southwestern Bell Telephone Company (Bell) in Order to Combat Competition.

I feel Austel has pertinent information for your office in regard to the allegations that some telephone companies affiliated with holding companies are engaging in questionable practices to thwart Austel from offering users the opportunity to acquire their own equipment.

Austel is an interconnect company located in Austin, Texas who sells, distributes and maintains telecommunications equipment manufactured by L. M. Ericsson, I.T.T., Stromberg-Carlson, etc. We have been in this business since June 1972. We have had a very good response from the businesses in Central Texas. Our equipment is installed in many of the leading businesses in the Austin area.

However, we have been faced with many unfair marketing practices by Bell. As of this date the operating telephone company, Bell, is regulated by City of Austin Ordinance No. 73-0524E passed and approved on May 24, 1973. This Ordinance lists and defines all the tariffs and regulations, and has been approved by the Federal Communications Commission. The problems started

long before these new tariffs were filed. When the new rates went into effect, it was billed by Bell and the media as a 9.5% rate increase. The local city council was hampered by Bell because of the fact that the rates and tariffs were in code and the City Council could not get any assistance from Bell to translate the code (USOC). Austel worked extensively with Bob Sheehy, our attorney, in apprising the City Council of the manner in which the rate increases would affect the community.

Some examples of how the rate increase affected competition are as follows:

	Monthly charge before rate increase	Monthly charge after rate increase	Percentage (+) increase or (-) decrease (percent)
Rates in the field of telecommunications where competi- tion does not exist:			
Touch-tone line charges:			
Residence.....	\$1.75	\$1.75	0
Business.....	2.25	2.25	0
STC interface devices.....	5.00	5.00	0
CDH interface devices.....	6.50	6.50	0
CD9 interface devices.....	6.50	6.50	0
Rates in the field of telecommunications where competi- tion does exist:			
6-button rotary dial key telephone.....	3.75	3.75	0
Color instrument charge.....	¹ 5.00	0	-100
12-button rotary dial call director.....	13.75	10.00	-27
18-button rotary dial call director.....	16.25	12.50	-23
24-button rotary dial call director.....	18.75	15.00	-20
30-button rotary dial call director.....	21.25	17.50	-17
PBX 300 series package:			
1st 20 stations.....	² 23.00	² 25.50	+10
Next 80 stations.....	² 11.00	² 12.50	+13
Over 100 stations.....	² 10.00	² 11.50	+15
6A intercom DB9 single link intercom:			
1st 9 stations.....	25.00	23.00	-8
Each additional station.....	² 1.50	² 1.70	+13
DA9 Sel. only type intercom:			
1st 9 stations.....	15.00	7.50	-50

¹ A 1 time charge.

² Each.

Other examples of irregularities in the rates in the cities of Austin, Dallas, Ft. Worth and San Antonio where there is competition in the telecommunications field.

Equipment	Monthly charge in other cities served by Bell	Monthly rate in Austin, Dallas, Fort Worth and San Antonio
12-B call directors.....	\$12.00	\$10.00
18-B call directors.....	14.00	12.50
24-B call directors.....	17.00	15.00
30-B call directors.....	19.50	17.50
DB9 single link intercom, 1st 9 Stations.....	25.00	23.00
Sel. only type intercom, 1st 9 Station DA.....	15.00	7.50

Not only does the tariffs make it hard for competition, they are sometimes quoted erroneously, both by accident and purposely to muddy up the water where a customer is faced with the decision of purchasing a system or renting it from Bell. We have had a case in Austin where a Bell local representative quoted the true rate for equipment and then offered a lower rate when the customer informed Bell that he was contemplating purchasing his own system from Austel. Not only did Bell come back with an alternate lower monthly rate—lower than stated in the tariff—but there have even been cases where the installation charge (a one-time charge) was used as leverage in forcing customers to stay with Bell.

We have even confronted Bell with their discrepancies, but to no avail.

We have proposals in writing by Bell where this practice has occurred. An example is as follows:

Bell's proposed equipment	Monthly charge proposed	Rates per tariff
Series 300 PBX:		
1st 20 stations at \$23.....	\$460.00	\$510.00
Next 30 stations at \$33.....	33.00	375.00
Econolight common equipment.....	4.00	4.00
6-button set.....	3.75	3.75
Mileage of detached station.....	8.00	8.00
Total monthly billing.....	508.00	1 930.23
Installation charge of \$400 ²		

¹ \$29.48 is included for Federal excise tax.

² The installation charge per the tariff has been quoted from \$400 to \$100 on this particular proposal.

This proposal was made after the rate increase was passed and approved and into effect. We questioned the rates with Bell and they still confirmed the lower rates. As of this writing this customer has not taken any action toward solving its communication problems.

Recently Austel sold a system to a customer in Austin and after we informed Bell that the customer had executed a legal contract with Austel, two Bell executives—it is our understanding that they were vice presidents out of St. Louis—came down to Austin and told the customer that if he would cancel his contract with Austel, Bell would install two PBX Switches of the same size for no installation charge. Unfortunately, due to this customer's position in community affairs, he will not publicly testify against Bell.

How much longer are these unfair business practices going to be allowed to go unchecked? Texas is currently without a public utilities commission. However, a bill has been introduced and the preliminary hearing is scheduled for December 7, 1973. We would appreciate any assistance that you and/or any of your associates can offer in eliminating these unfair practices completely. The Bill¹ as it now stands is very vague and unclear with regard to competition. The following is an excerpt from the bill:

Article 4. Obligations of Telephone Companies

Section 4.01. Service and rates. Every telephone company shall furnish adequate service and facilities at reasonable rates and charges.

Section 4.02. Discrimination. No telephone company shall discriminate unreasonably between consumers, classes of service or localities.

Section 4.03. Restraint of Competition. No telephone company shall discriminate unreasonably against businesses which sell or lease equipment or perform service in competition with telephone companies, nor shall any telephone company engage in any other practice that may tend to restrict or impair such competition.

Section 4.03 is the only mention of competition and regulations regarding unfair business practices in this preliminary bill. I feel that this Article can be improved and more specifically defined in relation to interconnect and competition.

In conclusion, in this business of telecommunications, there has always been political and economic setbacks for those who have entered into the competition. Fortunately, through the governmental bodies, capitalism and free enterprise can be and should be open to all avenues that are for the betterment of the people of the United States of America.

TIM STOKES,
Director of Marketing.

COMMUNICATION CONSULTANTS, INC.,
Phoenix, Ariz., November 29, 1973.

Mr. C. M. McLAUGHLIN,
Vice President, Reliable Communications Products Co., Franklin, Park, Ill.

DEAR MR. McLAUGHLIN: We are writing in reply to your letter of November 12th and Senator Hart's letter of October 29th.

We are aware of some of the tactics and strategies Senator Hart mentions in his letter. We cannot "document" cases of companies being told that Bell prefers to do business with "friends" but we have had people tell us they are

afraid to install their own telephone system because they will lose the purchases that Bell makes from them.

Many customers that do buy their own equipment are sent letters by Bell, which in themselves are not threats of poor service, but are carefully worded to encourage the customer to infer that poor service and coordination of service between Bell, the customer, and the interconnect company may be poor. Two samples of this letter is enclosed. In both samples, Bell acknowledges receipt of our order for interconnect arrangements, but later in their letters to the customer infers that they may not be the proper devices.

The availability of "Voice Connecting Arrangements" currently in Arizona is 28 days after receipt of written order. I understand it takes even longer in other market areas. This delivery, while not always a problem, does limit our ability to compete with Bell on any installations of service required sooner than 30 days.

If Bell required *all* their customers to wait 28 to 30 days for service I am sure the uproar would be heard in Washington, and so loud—that telephone wires wouldn't be required to carry it there.

We ask our interconnect customers to call us direct when any problem with telephone service occurs, so we may determine if and when Bell must be called to service their lines, central office equipment, or VCA's. We find the majority of service calls we perform is due to faulty Bell services. It is definitely a fact that the VCA's cause more service problems to us and the telephone users, than the amount of protection they render, in as much as the equipment we install, and most other interconnect companies, is made to standard public utility standards.

With regards to Bell pricing strategies we only have two instances that are worth mentioning. Bell is marketing and has filed tariffs for a "718" Key Telephone System that offers services of up to seven lines and eighteen telephones at a price 25 to 30% lower than usual with a few features not available to other key system users who pay the normally higher prices.

Further, we have found Bell quoting an automatic type telephone system for Semi-Public (Hotel/Motel) applications which is lower priced in every respect to tariffs on file. We cited three cases of this to the Arizona Corporation Commission on September 5, 1973. Mr. Ken Rotta, a staff member of the commission, telephoned us shortly thereafter and told me that Bell told him they were offering this lower priced system under a section of the General Exchange tariff which permits "special equipment and service arrangements". We discussed this section and agreed the intent was to permit a special telephone instrument modification or special wiring arrangement or feature—not a complete system at a lower price. Mr. Rotta said he would make a formal inquiry and as of this date we have heard nothing further, and Bell is still offering a lower priced system without filing a tariff.

We shall look forward to Senator Hart's subcommittee's efforts and hope they will result in ways and means to create an atmosphere for ethical, healthy competition, which will result in better equipment and service to the telephone user.

Very truly yours,

LARRY BUSHKIN,
President,

Communication Consultants, Inc.

JAMES STRAUSS,

Robert N. Ewing, General Contractor,

Phoenix, Ariz., December 15, 1972.

Re Communications services.

Memo to Mr. LARRY BUSHKIN,
Communications Consultants, Inc.
Phoenix, Ariz.

DEAR MR. BUSHKIN: The enclosed copy of Mountain Bell's letter is for your information and necessary action.

Sounds like sour grapes to me.

JIM.

MOUNTAIN BELL,
Phoenix, Ariz., December 11, 1972.

Mr. JAMES STRAUSS,
Robert N. Ewing—General Contractor,
Phoenix, Ariz.

DEAR Mr. STRAUSS: We have received your December 5, 1972 letter naming Mr. Larry Bushkin as your agent for communications services from Mountain Bell. Every effort will be made to cooperate with your agent. We are also in receipt of an order from your agent for the connecting arrangements to permit the connection of your system to the telephone network.

May I point out that when a third party is involved, there is room for misunderstanding. As your agent, Communications Consultants, Inc. may direct Mountain Bell to change your telecommunications service. Nonetheless, we will continue to look to you for payment for all bills and charges for services, including any increases or decreases authorized by your agent. However, Mountain Bell will continue to provide a professional communications consulting service at no additional charge, should you desire to use it.

Interconnection of your equipment with the Telephone Company network is in accordance with the rates and tariffs on file with the Corporation Commission of the State of Arizona and the Federal Communications Commission. Interconnection will be made through an interconnecting device as provided in the tariffs. The choice of the technically compatible interconnecting device is solely your responsibility.

Interconnection in no way changes our concern for providing reliable communications service and restoral of service if our facilities fail. However, under existing tariffs, a \$15.00 charge applies whenever a visit to your premises results in our isolating trouble to your equipment. At that time, our repairman will inform you or your representative what is found, and the \$15.00 will appear as an itemized charge on your telephone bill. In essence, once the interconnecting device has been installed, the responsibility for the communications system behind that device remains with you.

In regard to the connecting arrangements of your new telephone system, some type of provision should be made for a power failure transfer feature. Without this feature during a commercial power failure, no telephone service would be operable at your location. The attached options are available.

Prior to the time your system is installed, specific arrangements should be made regarding the date and time of the change, removal of our service, and trouble reporting procedures subsequent to installation of your own system. If installation or equipment removal is required outside of normal business hours or requires overtime for our people, then you agree to reimburse Mountain Bell for such costs, in addition to regular tariff rates and charges.

If you have any questions, I will be happy to talk with you and can be reached on 271-2831.

Yours very truly,

R. L. BURRILL,
Communications Consultant.

MOUNTAIN BELL,
Phoenix, Ariz., October 12, 1973.

DON W. HEIPLE,
Red Carpet Realtors,
Phoenix, Ariz.

DEAR Mr. HEIPLE: We have received your September 28, 1973 letter naming Larry Bushkin as your agent for communications services from Mountain Bell. Every effort will be made to cooperate with your agent. We are also in receipt of an order from your agent for the connecting arrangements to permit the connection of your system to the telephone network.

May I point out that when a third party is involved, there is room for misunderstanding. As your agent, Communication Consultants Inc. may direct Mountain Bell to change your telecommunications service. Nonetheless, we will continue to look to you for payment for all bills and charges for service, including any increases or decreases authorized by your agent. However, Mountain Bell will continue to provide a professional communications consulting service at no additional charge, should you desire to use it.

Interconnection of your equipment with the Telephone Company network is in accordance with the rates and tariffs on file with the Corporation Commission of the State of Arizona and the Federal Communications Commission. Interconnection will be made through an interconnecting device as provided in the tariffs. The choice of the technically compatible interconnecting device is solely your responsibility.

Interconnection in no way changes our concern for providing reliable communications service and restoral of service if our facilities fail. However, under existing tariffs, a \$15.60 charge applies whenever a visit to your premises results in our isolating trouble to your equipment. At that time, our repairman will inform you or your representative what is found, and the \$15.60 will appear as an itemized charge on your telephone bill. In essence, once the interconnecting device has been installed, the responsibility for the communications system behind that device remains with you.

If you have any questions, I will be happy to talk with you and can be reached on 257-2838.

Sincerely,

CAROL SENESE,
Accounts Representative.

GULF-STATES TELEPHONE CO.,
Mobile, Ala., December 3, 1973.

Mr. GERALD HELLERMAN,
Special Financial Advisor,
Senate Sub-committee on Antitrust and Monopoly,
Washington, D.C.

DEAR MR. HELLERMAN: In response to correspondence from Senator Philip A. Hart, dated October 29th, 1973, I am enclosing Attachment 'A', which relates a number of instances with which I am familiar concerning what, in my opinion, are illegal monopolistic actions on the part of certain telephone companies in the area served by Gulf-States Telephone Company.

All the situations described in the attachment hereto are factual; no names have been provided. In some cases, it would be difficult to prove in court that the circumstances described actually exist. However, there is enough information available, from individuals involved, for parties who might be concerned about the methods in which public funds were utilized in efforts to combat competition, to provide the justification for an investigation on the part of the Senate Sub-committee on Anti-trust and Monopoly.

Please do not hesitate to call upon me, or other officers of Gulf-States Telephone Company should you be so inclined.

Very truly yours,

JOHN C. HENSON,
Vice President.

I. In Mobile, Alabama, the Rodeway Inn hosted a state-wide Communications Workers of America meeting and received a letter complimenting them on the excellent service, food, etc. Later, the CWA discovered that the Rodeway Inn had an interconnect system installed by Gulf-States Telephone, and the CWA members in Alabama were told they would not patronize any firm with an interconnect system installed, either individually or as a group.

II. When the City of Mobile considered an interconnect system for the City offices, officials were told that the Bell employees would be instructed not to vote for them if an interconnect system were installed.

III. Again in Mobile, South Central Bell was requested to give Gulf-States Telephone a price for house cable installed in the Rodeway Inn. South Central Bell never gives a price for house cable until the interconnect company has paid for the effort necessary to "obtain" the price. The price quoted was \$6,000.00. The cable is considered to be worth approximately \$4,000.00, and Gulf-States Telephone offered \$4,000.00 for the cable. The cable was not removed; South Central Bell entered the Rodeway premises and cut the cable to the extent that it could not be used, but left it in the conduit. This practice, in some cases, makes it extremely difficult for the interconnect company to install their cable. This happens throughout the territory in which Gulf-States Telephone operates.

IV. In Pensacola, Florida, a Bell employee called a Gulf-States Telephone

employee to advise that his telephone conversations were actually being monitored and broadcast over a loud speaker in Bell's Central office.

V. In Panama City, Florida, on June 20th, 1973, a Gulf-States Telephone employee, acting as Communications Consultant for Top of the Gulf Corporation, requested from a Bell Marketing Representative a three (3) number Rotary Group for this account. The Bell Representative furnished the numbers 234-6628 and 234-6629, stating that "At this exchange there are no three line Rotary Groups available." This information was relayed to the customer and arrangements were discussed to substitute a third number, out of Rotary, to give the customer the necessary number of lines. On June 22, 1973, a Bell Representative called the customer and offered the third rotary number providing that Top of the Gulf Corporation used telephone Company equipment in place of purchasing their own equipment from Gulf-States Telephone Company.

VI. Local personnel of General Telephone Company in Dothan, Alabama, will not provide a date as to when interfacing will be available. Therefore, all conversion dates are uncertain. As an example, Bishop's Laundry & Cleaner was remodeled and were awaiting conversion so they could occupy their new quarters. The interfacing was not installed for a period of slightly less than sixty (60) days from the date General Telephone was notified.

VII. In the Dothan Office of Gulf-States Telephone, interfacing was requested and after thirty (30) days, which is supposedly the maximum time delay for this operation, Gulf-States Telephone employees "hard-wired" the interfacing. General Telephone made an on-premise inspection of our facilities and demanded that our key system be removed from their equipment immediately. Gulf-States Telephone employees did remove our equipment to avoid a confrontation. The necessary interfacing was provided by General Telephone approximately three (3) weeks later.

VIII. Out of seven (7) jobs in the Dothan area which have been installed in the last eight (8) months, there has been major malfunctions in the interfacing equipment provided by General Telephone in all but two (2) systems. On the conversion at the Opp National Bank, General Telephone technicians were unable to correct the interfacing problems and our own technicians were flown in to correct General Telephone interfacing problems in order to give the customer service. Other conversions have had the problem of interfacing just not working and "hard-wiring" was necessary in order to give the customer service. The Twitchell Corporation has constantly had problems with their interfacing. Here there is a delay in the transmission of voice through the interfacing. At the present time, this interfacing has been by-passed.

IX. When the Bell Companies in Alabama, Florida, and Georgia, are called upon for service to an interface device, and the Bell technician comes to the conclusion that the problem is within the interconnect system, the customer is charged for a service call, and the interconnect company who installed the system normally absorbs this charge. When an interconnect company is called upon for service to an interconnect system and it is determined that the problem is a Bell problem, the interconnect technicians normally stay to show the Bell technician that the problem is his. If the interconnect company attempts to bill South Central Bell for an interface problem that has been Bell's all along, payment is refused.

X. In the State of Alabama, South Central Bell told the State that it would not build a proposed \$50 million dollar computer center until certain tariff increases were approved. When the tariff increases were approved, South Central Bell indicated it did not intend to build the \$50 million dollar structure. The computer center cost was part of the justification used to obtain approval for the increased tariff.

XI. Recent rate increases in the states of Mississippi and Alabama have applied primarily to trunk lines and residential services while equipment rates for business systems have remained essentially unchanged, thereby making cost comparison between interconnect and South Central Bell services favorable to South Central Bell. (Reference attached letter which was mailed to Public Service Commissioners and Presidents in Alabama, Mississippi, Louisiana, Georgia and Florida.)

XII. When the Small Business Administration foreclosed on a loan against The Tradewinds Motel in Biloxi, Mississippi, and the SBA took over the building, the Bell house cable was abandoned and considered by the SBA and the attorneys involved to be leasehold improvements. Two (2) years later, the Tradewinds was purchased by an individual who elected to have an inter-

connect system installed. The interconnect company was informed that the cable belonged to the building as a leasehold improvement. When Bell discovered that an interconnect company was installing a system, they attempted to sell the cable to the interconnect company even though it had been abandoned for more than two (2) years.

GULF-STATES TELEPHONE CO.,
Communications Equipment and Systems Division,
 February 5, 1973.

To BOB BROWN
 Re Bell discrimination.

The incident described in the attached memo caused considerable embarrassment to Wally Sapp, our operations man in Montgomery, since he was accompanied by several other of our employees when Mr. Tharp refused to charge gasoline, after the tank was filled.

Wally was unable to get the name or title of the Bell man who stopped our service. What further action do you suggest be taken?

VAN GOSS.

GULF-STATES TELEPHONE CO.
 Montgomery, Ala., February 1, 1973

Intercompany memorandum to VAN GOSS.
 Re. Tharp's Buckingham Gulf Service.

I opened an account at Tharp's Buckingham Gulf Service, 4207 Norman Bridge Road, Montgomery, to service and gas vehicles in this area. Mr. Tharp welcomed our business and arrangements were made to bill us monthly.

Today I stopped to fill my company vehicle up with gas, and I was informed by Mr. Tharp that he could no longer serve Gulf-States. My first question was "Why?" He informed me that he served 155 Bell Telephone trucks, and that someone in the Bell System had asked him not to serve Gulf-States.

This seems unfair to me, and I wonder if something can be done about a situation like this.

WALLY SAPP.

BUSINESS COMMUNICATIONS SYSTEMS,
Communications Specialists,
 Salt Lake City, Utah, December 5, 1973

MR. GERALD HELLERMAN,
Special Financial Advisor,
Senate Subcommittee on Antitrust and Monopoly,
 Washington, D.C.

DEAR MR. HELLERMAN: I am writing in response to Senator Hart's letter of November 20, 1973 requesting information we can contribute regarding telephone company practices regarding "interconnected" telephone systems.

First may I say that I am extremely grateful and delighted that such a study is under way. We have felt helpless in our attempts to counter the unfair practices that Bell has used against us. I hope nothing will deter you from finding out the true facts in your investigation.

Upon receipt of your letter I sent copies along with a cover sheet to our inter connect customers and asked for comments regarding this matter. To date I have not received any written responses that I can send you.

Most business men with whom we have done business or have proposed systems to are very hesitant to send in information with their name on it for fear they will end up on a black list of Bells. Bell is so large and powerful that they can control a substantial part of the economy in any given community. They spend fantastic amounts of money every year in each community for purchase, maintenance and operation of vehicles; office equipment and supplies; physical plant construction and maintenance. Many local business men in each community sell a lot of merchandise to Bell each year and Bell uses that as a lever to entice them to keep their systems instead of purchasing their own.

A case in point is Marion Willey Ford in Bountiful, a small town north of Salt Lake City. We attempted to sell them a telephone system when they moved into a dealership a year or so ago. We made the proposal and when Bell found out that they were considering a private system they alledgedly made a

deal with the ford dealer to purchase a certain number of vehicles from them each year if they would continue to rent from the Bell System. The owner told me that for that reason he could not afford to install a private system and so we lost the job to Mountain Bell. In another case, we approached Scott Tractor Company, the John Deere Distributor here about a system. The owner there told me that Wheeler Machinery, the Caterpillar Dealer, had lost a \$30-\$40,000.00 order to International Harvester on a Mountain Bell Bid because Wheeler had installed a private system and International had stayed with Bell. Therefore he would not consider a private system because he didn't want to run the risk of being on Bell's black list. In another case a Mr. Lake-owner of an office supply firm again turned down our system because of repercussions from Bell if he put in his own equipment.

We installed a system for an athletic club and Spa who is located a few doors away from Bells Headquarters here in Salt Lake. Bell exerted pressure on their employees who were members to quit the club and posted a notice that the club was "unfriendly" towards Bell and cautioned employees about doing business there.

There have been many subtle hints and suggestions to people who do business with Bell that any change to a private telephone system would result in a cancellation of any future sales to Bell.

We have heard from reliable sources within the telephone company that there exists a so called "enemies" list of businesses who have installed private systems here in town and all Bell employees are asked not to do business with any of the firms listed and of course Bells own purchasing department is not to buy from any companies listed either.

Bells sales people have also threatened our potential customers with their intention to raise line and interface charges and reducing equipment charges. They have down graded our equipment to our customers and also our ability to stay in business.

We were involved in a rate reduction suit this past summer in which Bell wanted to reduce the rate on the 10 button telephone from \$9.00 per month to \$6.00 per month. A 33 1/3% reduction their stated reasons were as follows:

1. Variable length handset cords are not available for the 10 button set.
2. Speaker phones cannot be used in conjunction with the 10 button set.
3. Amplified handset were not available for 10 button sets.
4. A busy lamp field could not be provided with 10 button sets.

Not one of these are valid reasons, in fact in just a few hours of driving around looking at telephone systems installed by Bell I found two systems where they were actually providing busy lamp field in a ten button set and one where they had variable length handset cords in service. I also called the business office and posed as a Bell customer and asked if the 5 specific items they claimed were not available in their brief to the P.S.C. were offered on ten button sets. I was told they were available and was quoted rates on them.

This was obviously an attempt by Bell to eliminate competition by reducing rates. We have not had a ruling from the Utah Public Service Commission yet so I can't say whether the rate reduction will be allowed or not.

The hearings cost approximately \$8,000.00 and if the ruling is in our favor I expect Bell to appeal which will cost us even more.

The situation is very hard on us. We cannot sit still and let them run over us but we cannot afford the court costs either. Bell knows that and their attorney—a Dennis Stack from Denver even said during a break in the hearings that our attorney had better "check his pocket book" to see if we had enough money to continue. The inference was that they would keep us in court by bringing up side issues until we were broke and couldn't continue. They did this successfully for a while but we were finally able to get it submitted. Their delaying tactics were very costly for us and because of the cost made us cut short our arguments in order to get the case submitted.

Bell makes money on hearings—it goes as one of their operating expenses which if they become too large qualifies them for a rate increase.

Bell is using unethical practices in competing with the private systems supplier. They do it in many ways. I hope your committee will be successful in its attempt to gain accurate information and to introduce legislation to correct the problem. If I can be of further assistance please call on me.

Sincerely yours,

BRENT G. BROWN.

BUSINESS COMMUNICATIONS SYSTEMS,
Communications Specialists,
 Salt Lake City, Utah, March 1, 1974.

MR. GERALD HELLERMAN,
Special Financial Advisor
Senate Subcommittee on Antitrust and Monopoly.

DEAR MR. HELLERMAN: I am again writing in response to Senator Hart's letter of November 10, 1973 requesting information regarding telephone company practices. Especially their practices in response to competition from, "interconnect" companies.

A most recent case I personally had, regarded an O.C. Tanner Jewelry Co., 1930 South State Street, Salt Lake City, Utah. When I asked if I could prepare a proposal for them, I was told, "We have a National agreement with Bell to produce the Bell emblem that most of their employees wear. We also have an agreement that Bell employees may purchase their jewelry, watches or any other item we carry at a special rate. We cannot possibly jeopardize our agreements with Bell by purchasing our own telephone system."

They refused to write a letter to you for the reason that word somehow would get through to Bell that they weren't one of Bell's "friends" anymore.

A local carpet wholesaler has recently purchased a private phone system. They reported to me on February 15, 1973, that they had lost their first order in fifteen years on some carpet they have been selling to Bell. They asked me not to mention any names in this letter I am writing. They told me the purchasing agent at Bell had told them that he had instructions to "spread around" their business a little more. Strange that this instruction took fifteen years to come, and only 3 weeks after purchasing a private system, wouldn't you say?

I will be happy to supply further cases in the very near future.

Sincerely,

KEN NEELEY.

BELEW SOUND & VISUAL,
 Bristol, Tenn., December 6, 1973.

HON. PHILIP A. HART,
Chairman, Subcommittee on Antitrust and Monopoly,
U.S. Senate.

DEAR SIR: We very much appreciate your letter asking for questions on the telephone-interconnect situation.

We have one example, in which we think you would be particularly interested, and some other generalizations, which we would like to express as truth without actually being able to bring witnesses to you in Washington.

Our peculiar position arrives from the fact that we are dealing with an independent telephone company, known as United Inter-Mountain Telephone Company, which services an area from Wytheville, Virginia, through, Greenville, Tennessee.

Now we will assume, Senator, that you have heard of interconnect devices, called interfaces, which the Telephone Company demands be supplied by them before inside telephone can be hooked to their lines.

For the CDH interface, AT&T put out a bulletin over the country advising that the telephone companies rent this interface for \$5.25 a month. Bell Telephone, taking advantage of their control of the Utility Commission, asked for \$6.25&, \$6.50 and \$6.75 a month in various states.

However, under the complete *Dominion* of the Inter-Mountain Telephone Company (as we call it locally), and the General Telephone Company, in our area and in other areas of Tennessee and Virginia, they have been allowed a rate of \$12.50 a month.

We, being interested in this particular problem since it poses us greater difficult in selling interconnect telephone, phoned the Utility Commission in Tennessee and the State Corporation Commission in Virginia, to ask for the reason for the differences, and received exactly the same answer to our question at both places.

The answer was a bare-faced lie—not by the Commission—but from what they had been told by the Telephone Company.

The story ran thusly: "We (Telephone Company) have to buy from Western Electric. Western Electric builds the interfaces."

"The Bell Telephone Company is financially related to Western Electric (a fact we all know): therefore, Western Electric can sell to Bell much cheaper than they can sell to us."

Sir, even the State Utility Commission should know that under United States law a corporation cannot sell at cheaper rates to one company than they do to another.

We investigated this matter: and then we went to Richmond to meet the State Corporation Commission at a public hearing on the behavior of the Inter-Mountain Telephone Company.

At that time, we took fifteen duplicate documents to give to the State Corporation Commission members, the lawyers concerned, and the Telephone Company.

In this document we enclosed catalogues which showed that *Western Electric did not build the CDH interfaces bought by Bell; but they purchased them from Elgin Electronics.*

On approaching Elgin Electronics, we found that they make two model numbers of this particular interface; one of which models is sold to the Western Electric under one number; but the other number is sold to independent telephone companies and is an exact duplicate mechanism.

We further showed that we can purchase CDH interface from three other companies and can buy them for \$136 each in quantities of 50, and have heard that the Telephone Company has been able to buy them for considerably less than this sum. *Yet they charge double rate and pay out this cost in less than one year.*

Our question would be: *Why should a telephone company be allowed to practice such financial duplicity at double the cost for an interface in portions of a state?*

We are most interested in seeing their rates brought into line with Bell rates, as we regard this as an example of placing their rate structure in such a way as to inflict the most damage on interfacing customers.

We have an interesting anecdote to relate.

At last months hearing of the Tennessee Utilities Commission, a group of the interconnect dealers had appeared with legal counsel as interveners at the Bell Company hearings in Nashville, Tennessee.

Bell was applying for new rates, and as usual was juggling to put the burden on the common home phone owner at the expense of lessening their rates to industries to fight interconnect.

It was the first time that official interveners had appeared before the Commission *in the 75 more or less years of its history*—aside from "the little old lady."

The attorney for the interveners started with this statement: "You gentlemen of the Utilities Commission are here to represent the people of Tennessee. . . !"

He was interrupted by the Chairman of the Utilities Commission, who blatantly stated his true motives with a statement that: "*We are here to represent the interest of the Bell Telephone Company—stutter, stutter—and the State of Tennessee.*"

We think this reflects the total thinking of the North Carolina Utilities Commission, the State of Tennessee Utilities Commission, and the State of Virginia Corporation Commission.

We would also like to cite some small aggravations.

In order to attach one phone in a local factory, it took approximately *3 phone calls, 5 letters, and 3½ months to get the proper interface.*

In attaching a 3 line, 3 trunk, PAB-system, in the State of Tennessee, it took us the usual letters, *4 phone calls, one visit, and over 3 months to get the proper interfaces.*

The Telephone Company always shows an amazing unawareness and ignorance of any type of interface needed. Their people cannot repair them: our people show them how.

In another place from which we have a letter expressing complete approval of our work and expressing the owner's satisfaction with the system, we found the Telephone Company telling at Rotary Clubs that where we had placed the interfaced phone systems the owner was thoroughly dissatisfied.

This has been a constant history, and is going to be a constant history, until the Congress or the FCC sets standards which will override the State Corporation Commissions and compel the Telephone Companies to accept interconnect as a new way of doing business.

We are the only intercom company in the Inter-Mountain Telephone Company domain; and we are too small to carry law suits through the State Utilities Commission in Tennessee, the State Corporation Commission in Virginia, and are somewhat at the mercy of the Telephone Company.

We greatly appreciate your letter and your interest in effecting a cure for these situations.

Sincerely,

W. W. BELEW.

ELECTRONIC ENGINEERING Co. OF OHIO,
December 6, 1973.

Mr. B. P. HARDERS,
Manager, Systems Apparatus Sales, Northern Telecom, Inc.
Elmsford, N.Y.

DEAR MR. HARDERS: I received your letter dated December 3, 1973, and am very unhappy with the response. I know that the Pulse SG-1 is currently being sold into the Bell system. Specifically:

Pacific Tel. & Tel. Advice Letter #11165 dated October 24, 1973 signed by Arthur C. Latno, V.P. was a tariff filing for the Pulse SG-1. CPUC approval could not have been received until November 24, 1973, which is a short three weeks ago. Since Electronic Engineering Company has been selling Pulse since our first installation in February 1973, I would assume we should be considered an earlier customer for the Pulse switch than PT & T.

I have a "gut feeling" at this moment that I am being removed as a Pulse dealer because I am a member of the interconnect industry. I hope this is not the case and, infact would like to sit down with you and amicably discuss your shipping schedule and how I could coordinate my requirements with your deliveries.

Should you choose not to discuss this matter with me, I will contact the International Section of the Anti-Trust Division, Department of Justice and you will face Civil Investigation Demands.

I appreciate, in advance, your attention to my problem.

Sincerely,

MARTIN A. LEIBOWITZ,
Vice President.

ELECTRONIC ENGINEERING Co. OF OHIO,
November 27, 1973.

Mr. RAY BELLOWES,
Vice President, Sales,
Boston, Mass.

DEAR MR. BELLOWES: Confirming my telephone conversation with you, I am pleased to introduce my company, Electronic Engineering Company and formally request your assistance in supplying us with Pulse SG-1 PABX's and other products.

So 1 sound Industries, Inc. (dba Electronic Engineering Company and dba Audio Hall) was incorporated in Ohio in 1937 and has been catering to the communications needs of Northeastern Ohio since its founding. We provide professional audio equipment, interconnect telephone equipment (our largest segment of business), manufactured industrial communications devices, and other equipment.

Our telephone customer list is enclosed. Our other customers include many in the Fortune 500 (e.g. more than 130 installations in 30 countries for Goodyear alone).

I am currently committed to the SG-1 through technical training, inventory, and sales approach. However, after February 1, 1973, Buckeye Telephone Supply, my current supplier, *will not be a distributor*. I hope you will process orders from Electronic Engineering Company for this equipment.

At your recommendation I am forwarding financial information to Bruce Harders. Also included is a copy of a blanket order for 36 SG-1 PABX's for 1974 which Buckeye Telephone will not be able to fill.

I am looking foward to hearing from a representative of your company concerning our detailed needs. Thank you for your attention.

Sincerely,

MARTIN A. LEIBOWITZ.

NORTHERN TELECOM, INC.,
Elmsford, N.Y., December 3, 1973.

MARTIN A. LEIBOWITZ,
Electronic Engineering Co.,
Akron, Ohio.

DEAR MR. LEIBOWITZ: Thank you for the financial and background information on your firm.

For the time being, we are not in a position to add any new accounts, due to the shortages we have experienced as a result of a strike and un-expected high market demand. We trust that the situation will clear up by mid 1974, and we will contact you at that time to determine if you are still interested in Pulse.

Thank you for your interest.

Sincerely,

B. P. HARDERS,
Manager, Systems Apparatus Sales.

EXECUTONE COMMUNICATIONS CO.,
Fresno, Calif., December 10, 1973.

MR. GERALD HELLERMAN,
Special Financial Adviser, Senate Subcommittee on
Antitrust and Monopoly, Senate Annex,
Washington, D.C.

DEAR MR. HELLERMAN: I received a copy of the letter written to Mr. Edward Brody by Philip A. Hart, dated November 6th, requesting information regarding competitive practices by telephone companies relating to "the interconnect industry."

This letter requested information wherein undue pressures and scare tactics have been utilized by the telephone company to potential interconnect customers. I wish to state that in my experience, this has generally been the case. To be more specific, we had an actual order signed by an architectural firm for an Executive System. After signing this order they were contacted by the telephone company. The telephone company made it known either directly or indirectly that should this architectural firm wish to receive any additional work in the design of telephone buildings, etc., they had best stay with the telephone company in lieu of our company. The architectural firm then cancelled the order, but due to the pressure, did not actually put in writing the reason why.

We also had an order signed by a local businessman for an Executive System. In this case it was a frozen food company. Upon notifying the telephone company that they were going to install an Executone System, the phone company had a meeting and exerted extreme scare tactics to the point that the owner's wife became extremely nervous and they cancelled the order.

I also attended an architectural meeting wherein Bell Telephone had their representative speak, relating to why people should stay with the telephone company versus owning their own system. Their presentation was definitely distorted and the true facts were not actually brought to light.

At the present time we are trying to market a key telephone system and the telephone company is making it extremely difficult by not having the correct interconnect device that they require tarified in California, even though this is available in other parts of the Bell System and is presently in tariff in those states. This necessitates our furnishing additional equipment that would normally be required to interconnect into a different device provided by the telephone company. The interconnect not available is known as STP. The interconnect that we must use is known as the C2ACP.

There are many other instances where undue pressures have been brought as well as the distortion of facts. The problem is to actually have these people sign a complaint. This is extremely difficult, due to the repercussion that they may face, or at least, feel they might encounter.

They have also been advertising extremely heavy relating to interconnect, stating that people should contact them first, etc. This is available to them, since it is assumed that they have unlimited funds.

I do hope this information will be helpful and that the necessary steps may be taken to limit the telephone company's activities.

Sincerely,

JOE WALTEN,
President.

EXECUTONE, INC.,

Long Island City, N.Y., November 8, 1973.

MR. ANGUS S. ALSTON,
Southwestern Bell Telephone Co.,
St. Louis, Mo.

DEAR MR. ALSTON: Executone of Kansas City, Inc. has informed us of two instances during October, 1973 where Southwestern Bell Telephone Company Marketing personnel have initiated sales activity for certain items with a customer, after that customer and Executone of Kansas City, Inc. informed Southwestern Bell that a binding agreement for these same items existed between them.

The customers involved are as follows:

Mr. Larry Patterson, Internal Professional Association, Room 204, Medical Arts Building, Topeka, Kan.

Mr. Harlan Hallmer, Menninger Foundation, Department of Neurology, Box 829, Topeka, Kan.

Further details may be obtained from:

Executone of Kansas City, Inc., 9185 Bond, Overland Park, Kan. 66214, telephone (913) 888-7100.

We were advised of your policy on not having sales contact with our customers once the contract has been signed. Please inform your new manager in Topeka of your policy.

Sincerely,

D. G. JUDD,

Manager, Telecommunications.

CENTRAL TRAVEL & TICKET, INC.,

December 10, 1973.

MR. JOHN DEVOL,
President, Cousino Communications, Inc.,
Toledo, Ohio.

DEAR MR. DEVOL: On Monday morning, December 3, 1973, an Ohio Bell Telephone Company installer was on our premises to complete installation of our Interconnect Telephone System.

During the time that he was on our premises, he made the following remarks which were unsolicited by anyone in our organization.

(1) He stated that a \$25.00 charge applied each time that an Ohio Bell serviceman came out to check the telephone service.

(2) He further said, "Hope you have better luck than others have had with interconnect."

(3) He said that the equipment was "Jap manufactured," and that we would have trouble obtaining replacement parts.

(4) He indicated that one of the "suppliers" of Cousino Communications had gone bankrupt.

(5) He also mentioned that a recent business failure in the interconnect business in Toledo had just taken place.

Mr. DeVol, in light of the difficulty we had experienced when Ohio Bell failed to meet their commitment of a cutover date, and the subsequent delays when they did not provide additional line service as we had requested, we are concerned and are wondering if this latest incident is part of a planned and calculated effort to intimidate and harass us since we have acquired our own telephone system.

Incidentally, the phone system you installed is working properly, and we are very pleased with your response and cooperation in this matter.

Yours truly,

JERRY SIMONS,

Vice President.

AMTEC,

New York, N.Y., December 10, 1973.

GENTLEMEN: In early November 1973, I called the Bell Telephone Co., and spoke to Mr. Massiello and told him of our intention of moving by December 1973. He gave us a date of December 17th, 1973. There later arose in November

a problem with the color of the telephones. We had ordered red telephones and Mr. Massiello informed us that red was unavailable. This forced us to seek our color preference elsewhere.

On Friday December 7th 1973, I called New York Telephone Co., Mr. Massiello then said "If you go interconnect, the phone company will not move you until January 14th 1974, instead of December 17th. 1973."

Why is it that that we can move December 17th with Bell, and cannot move our own system until January 14th, 1974? This is especially confusing since we gave the Telephone Company 1.5 months notice, and all we asked Bell to do, is to move the line downstairs, which they agreed to do anyway by December 17th 1973.

We must seek an immediate solution to this problem, as we must vacate our premises on December 30th, 1973.

Any assistance in this matter will be greatly appreciated.

Sincerely,

J. SHERLOCK.
President.

GCE TELEPHONE Co.,
Oakland, Calif., December 12, 1973.

HON. PHILIP A. HART,
Chairman, Subcommittee on Antitrust and Monopoly,
U.S. Senate.

DEAR SENATOR HART: I am writing relative to your letter of November 20th asking for information concerning our experience in dealing with the local telephone utility.

It has been a bit frustrating as I believe Pacific Telephone & Telegraph feels that no one except itself is capable of providing telephone equipment service. PT&T's response to competition has been in several areas. In each of Pacific's bills the customers receive a small notice advising them of the dangers of owning their own equipment. Every morning on several of the local radio stations, from the hours of 0700-0800, their spots advise anyone considering the purchase of a system to consult first with PT&T. They infer that a private system purchase is fraught with hidden problems such as poor equipment and service and technical obsolescence. They have also taken out ads in periodicals which depict the interconnect company as something not much better than a crook.

I feel that these are highly unethical forms of advertising and question whether they are a legal form of advertising for the utility to undertake.

Besides the local posture that Pacific takes politically they, of course, do compete very aggressively for the customer's confidence before and after the sale is made.

Recently, one of our customers, the Fred Meyer Company of Emeryville, California, experienced telephone problems such as disconnects and noise on the lines. We thoroughly investigated our equipment and could find no problem. Normally, we contact Pacific relative to service problems; however, our customer did it in this case. At first he was flatly refused service because he had a private system. Later, he called PT&T back and explained to them that he had called several other Pacific customers in the area as well as the former tenant of his premises and all reported similar problems. Several days later Pacific arrived and corrected a problem on their interface equipment. However, this was not done without making it perfectly clear to the company that their communications would always be in jeopardy because a private system had been installed. The customer confided to me that they probably would not have installed a private system if they had known that poorer service would be a result of this move.

The type of equipment installed by Pacific is also another headache. Their interface devices are troublesome and as a practical matter we often times hard wire around them. The cost in extra man hours to work around their defects is considerable. More importantly, the telephone users get a less reliable system because of these devices.

We actually have one case, the University of California in Berkeley, where we have had to disconnect PT&T's interface so it would not interrupt service on the local Pacific PABX.

I appreciate your looking into this problem which, I suppose, can be expected with every new venture of such magnitude. The small businessman needs an understanding and enlightened legislature to assist him in keeping his place in America's free enterprise system.

Sincerely,

WALTER F. CORBIN,
President.

BUYING TELEPHONE EQUIPMENT OF YOUR OWN COULD INVOLVE PROBLEMS AND COSTS THAT YOU HAVEN'T BARGAINED FOR

The devices we're referring to have been advertised in magazines, newspapers, on radio and TV. They're also available through the mail, and perhaps at your neighborhood department store. They come in various colors, and perform a variety of functions. But one thing they all have in common—they must be connected to your telephone line to be of value.

And that's the rub. Usually the ad says something like—"quick, easy installation" or "all you have to do is plug it in." But don't bet on it because it's not that simple.

You see, were responsible for your telephone service. All of it. And that service depends on two basic elements—the telephone network that carries your calls, and the equipment connected to that network. These two must work together compatibly to insure that you and other customers receive high quality telephone service.

We want to be sure that your equipment will work properly with our network. So before you "plug it in," your equipment must be connected through special Telephone Company installed arrangements. And that may cost more than you planned to spend. For example if a connecting arrangement is required, there's a one-time connection charge and a recurring monthly charge.

You can avoid the big gamble. Call your local business office. You'll find the number on your telephone bill. The service representative will be glad to explain the charges and the procedures to be followed.

PACIFIC TELEPHONE.

Before you get razzle-dazzled into buying a new phone system, make one last call on your old one.

Call us.

Call a Communications Consultant at your Pacific Telephone Business Office and check out the advantages of using our service on a monthly charge basis rather than buying a system.

First of all, you won't be tying up capital that you could be putting to better use in your business.

Secondly, you won't need to pay property taxes on the equipment, or worry about insurance.

And finally, you can be sure your service is never obsolete, because Pacific Telephone can keep it updated with the latest improvements. We

offer you over 1000 products and services to choose from.

There are 4000 other good reasons for going with us . . . the thoroughly-trained repair workers in our 130 maintenance centers throughout California.

So before you buy, give us a call.

It won't cost you a cent.



Pacific Telephone

Part of our business is helping business.

November 1972

PSA Magazine

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SAWYER COMMUNICATIONS CONSULTANTS INC.,
Portland, Oreg., December 20, 1973.

Mr. GERALD HELLERMAN,
Special Financial Adviser,
Senate Subcommittee on Antitrust and Monopoly,
Senate Annex,
Washington, D.C.

DEAR MR. HELLERMAN: Senator Hart's recent letter was like a ray of sunlight in a stormy sky. We are happy to pass along several experiences we have had; however, hard documentation would be difficult to

provide as there is not much that has been committed to paper. Also, our legal counsel informs us we should not name names.

We recently installed a system for a grain company. As you may know, certain areas in any building are earmarked for tenant telephone equipment. In this instance the telephone company put pressure on the building management and they refused our customer access to this public space if they bought private equipment from us. The customer wanted their own equipment, so used their own leased office space to store their telephone equipment and did not make an issue of the refusal.

Also at this grain company, the telephone company representatives told the manager that the telephone company interconnect devices would *never* be removed. This lends weight to the view that these devices were intended as a punitive measure to those wishing to purchase their own systems rather than to protect the network. In fact, the equipment we handle is used by independent telephone companies throughout the country in their central offices as well as customer installations, yet our customers are required to pay monthly interconnect charges to "protect" the network.

One of our first accounts was a savings & loan in Portland. They have been a very satisfied customer and have had our systems installed in their main office as well as all their branches. We frequently use them as a reference for potential customers. We recently sold a large system to a newspaper in southern Oregon. The telephone company told the newspaper that the reason we got such glowing statements from the savings & loan was because our company was wholly owned by them. They were also told that they would be very sorry they had made the decision to purchase.

We were furnished a document by the manufacturer we represent that said, in effect, that the end user would be provided with service for ten years if we should happen to go out of business. We use this document in many of our proposals. The telephone company in the state of Washington copied this document and used it in their proposals. They told potential interconnect customers that this meant that the manufacturer of these systems anticipated a life expectancy of only ten years.

There have been many instances where our customers have suffered a slow down in service from the telephone company because they have a private system. While these situations seem to have improved recently, we have discovered a few instances where our switching systems have been tampered with. There have been two of these situations in the past few weeks. They were not severe, just "pesty."

The Oregon PUC recently approved rate increases for the telephone company which effectively "juggled" rates around—a little off here, a little added there—which tended to lower the rates on equipment offered to business but raised line charges to aid the telephone company's competitive position on equipment.

The telephone company has said and done many detrimental things. They are obviously not committed to paper so the only way we can report on them is to repeat statements and situations. We spoke to our attorney about a number of these instances and he contacted legal counsel for the telephone company. The telephone company's reply was that, in effect, we had no case because we were reporting "fragments of conversations that were 'overheard,' accusations based upon alleged refusals to 'cooperate'." This rather effectively closed the door on reporting anything further to the telephone company.

Sincerely,

BEN S. SAWYER,
President.

BARBARA B. HIRSCH,
ATTORNEY AT LAW,
Chicago, Ill., December 26, 1973

Hon. PHILIP A. HART,
Mr. GERALD HELLERMAN,
Senate Subcommittee on Antitrust and Monopoly,
Washington, D.C.

GENTLEMEN: This is in reply to the letter of Senator Hart of October 29, 1973, addressed to Private Tele-Communications, Inc., 1300 West Belmont Avenue, Chicago, Illinois 60657, attention: Mr. Ronney L. Harlow. That letter

stated that the Subcommittee has received information charging that the telephone utilities have acted to thwart the competition offered by companies in the telephone interconnect industry and sought information as to any such practices which Private Tele-Communications, Inc. has encountered.

The purpose of this letter is to provide, as briefly as practicable, some of Private Tele-Communications' experience in its attempts to offer alternative telephone equipment and service to that offered by Illinois Bell Telephone Company, the American Telephone and Telegraph Company's operating company in the Illinois-Indiana area.

Initially, I wish to express, on behalf of my client, Private Tele-Communications, Inc. (PriTec) and its president and founder, Mr. Ronney L. Harlow, our gratitude that your subcommittee is providing a means of airing the serious problems which we have faced and we are most hopeful that your attention to these problems will result in action which will not only allow PriTec and others in interconnect to survive, but will allow the public the benefits of free and open competition in this market.

1. BACKGROUND OF PRITEC

PriTec was originally started in 1901 in Berlin, Germany, by Mr. Harlow's father and the company was engaged in telephony, interconnecting its equipment with the German government-operated telephone lines. The German company has been sold in 1928 and has now become part of the Tele-Norm complex, which is among the largest of German industries.

Mr. Marlow came to the United States in 1941 with an unusually broad knowledge of the field of telephony. He served in the United States Army in Communications Intelligence for Supreme Headquarters. Shortly after his discharge from the Army, he incorporated PriTec in Illinois. Because interconnect had not then come to the United States, PriTec concentrated its business in internal communication systems, paging, and public address. Mr. Harlow has been active in the private communications associations and has served as an officer in certain of the established communications trade associations.

Because of his unique qualifications and expertise in telephony, Mr. Harlow was in an excellent position to understand the full meaning of the *Carterfone* decision issued by the Federal Communications Commission. Almost immediately, PriTec obtained financing to expand the PriTec business into the interconnect field. Notwithstanding the *Carterfone* decision, however, PriTec has suffered numerous problems in their dealings with American Telephone & Telegraph and Illinois Bell. PriTec has engaged in business throughout the Chicago metropolitan area, and in parts of Indiana and Wisconsin, and looks forward to expanding its business. However, because of the difficulties that PriTec has faced with the utility, its future in the interconnect field has been seriously affected.

PriTec has been active in its efforts to obtain and secure its right to comply freely and fairly. Mr. Harlow is a member of the executive board of the North American Telephone Association (NATA) which association has sought to represent the viewpoint of interconnect equipment manufacturers and sellers. PriTec is also a member of Communications Systems Contractors Association, a Chicago based association of sound and communications companies. Mr. Harlow has been serving on a Better Business Bureau committee for the purpose of seeking cooperation between interconnect telephone companies and the utility. Mr. Harlow has brought his industry's problems to the attention of the Federal Communications Commission, and has requested assistance of the Illinois Attorney General's Antitrust Division as well as the Chicago office of the Antitrust Division of the United States Department of Justice. Moreover, PriTec has petitioned the Illinois Commerce Commission and participated in many matters there. Those matters will be discussed hereinbelow at Section 3 of this letter.

PriTec has, of course, considered the pressing of a civil suit (particularly; an antitrust suit) against Illinois Bell and possibly its parent, American Telephone and Telegraph, but is faced with the practical reality that the expense inherent in protracted litigation against these corporations may itself put PriTec out of business. PriTec's problem in this regard is further compounded by its understanding that the public must ultimately subsidize the utilities' expenses of defending such a suit in that these costs may be passed

on to the telephone user in the form of increased utility charges. This has been PriTec's experience in its efforts at the Illinois Commerce Commission. While PriTec has not totally abandoned the possibility of pressing a private suit, we know that the government is more able to take on such a challenge and we believe that there is sufficient public interest so that the government may well consider litigation or regulation protecting competition in this area.

2. EXAMPLES OF UTILITY INTERFERENCE IN PRITEC'S EFFORTS TO COMPETE

It must be said at the outset of this section that PriTec has met with almost daily interference from Illinois Bell. We are, therefore, providing the subcommittee with an outline of only some examples.

(a) When PriTec obtains a contract from a customer for the use of a PriTec system, it realizes its duty to advise Illinois Bell Telephone Company (IBT) that it has a contract so that the interface device can be installed. PriTec's procedure is as follows: The customer signs a contract of some years' duration; the customer then writes a letter to IBT on his own letterhead, advising IBT that it has contracted for the installation of telephone equipment from PriTec and that PriTec will be arranging for cut-over on its behalf. That letter on customer letterhead is sent to IBT, addressed to the Marketing Department. Then, PriTec sends a registered letter to the interface coordinator at IBT. The PriTec letter sets forth the type of interface device required and the dates for installation. PriTec encloses a copy of the customer's letterhead letter, and PriTec sends its letter by registered mail or hand delivers it, obtaining a receipt. Immediately upon IBT's receipt of the letter, PriTec customers are contacted by IBT employees. IBT calls this contract a "verification." Due to the nature of the "verification" PriTec estimates at this writing it has lost 20% of its business even though contracts had been signed. IBT "verifications" are done by phone or at the customer's premises without notice to PriTec. As a result of the IBT "verification," PriTec customers have, on occasion, invited a PriTec representative to be present at a conference with IBT personnel on the customer's premises. This, however, is rare. PriTec has consistently offered to make available to IBT materials which would verify that the PriTec contract has been signed with the customer, even though the customer's own letter to IBT should be more than sufficient. IBT has refused to deal with PriTec on such "verifications" and insists upon contacting PriTec customers prior to the date the installation is made. In the course of such "verification" contacts, IBT employees have said the following to PriTec customers:

(1) "Have you been advised of the additional charge that you must pay for interface device?"

(2) "What are the terms of the PriTec contract, and what is the cost?"

(3) "Why did you select a private company?"

(4) "What equipment will they furnish?"

(5) "Do you know that your line charges will increase if you use PriTec equipment?"

(6) "We only want to help and advise you."

(7) "We will rip out the wiring and leave holes and markings on the walls and ceilings and while we will try not to damage anything, it may be that we will cut your ADT wiring and if so, that is unfortunate."

(8) "You understand, of course, that you will not be listed in the telephone directory."

(9) "You understand, of course, that you will not be able to get off-premise lines (that is, lines connecting extension phones in separate buildings in which the customer does his business)."

(10) "The service is, of course, not what you would be getting if you dealt with the utility's equipment. Do you really know what you are doing?"

In one such instance, PriTec had a signed contract with a customer and an IBT representative dissuaded it from performing. Apparently recognizing that he had tortiously induced a breach of contract and he was exposing the utility to liability, he obtained a letter from the customer purporting to release the utility from liability in the event of a suit.

(b) IBT has decided that it will install interface equipment where it pleases. While it was customary to put interface devices where the utility's

equipment was, now IBT has put interface devices at the entrance of the building, sometimes far from the PriTec equipment, although there is a separate charge for installation in addition to the monthly interface charge tariffed and billed to the subscriber. This is described more fully in the last paragraph of page 10.

(c) There is a tariff which provides that the utility will install telephones on jacks or plugs ordered by customers. A PriTec customer has ordered utility equipment and plug but was not allowed to receive the same because the utility said that "by design or inadvertance," PriTec equipment may be plugged into the jacks. As a consequence the customer was deprived of utility-available equipment, tariffed for the general public and this denial was without any justification.

(d) PriTec has sought to sell its equipment through the customary marketing and merchandising means. It is faced with the obstacle of extensive utility advertising, which advertising promotes utility equipment. This advertising is paid for by revenues from the monopoly and rates are increased to the general public to defray advertising in an area which should be part of the private sector rather than part of the utility monopoly. PriTec also observes that AT&T is not of the top 10 advertisers in the United States; that PriTec is informed AT&T spends approximately 86 million dollars annually for advertising paid for by the public. And these ads are often for equipment directly competitive with the private equipment sector. Of late, the Bell System has undertaken a regular series of advertising addressed to the PABX (switchboard) and multiple button key phone ("call director") market. PriTec's predominant business is in PABX and multiple button key phones. The advertisements, many of which appear in *Time* magazine are directed to derogate interconnect and raise unwarranted fears as to continuity of service and reliability of the interconnect industry. If AT&T is to advertise so as to discredit competitors, PriTec contends it should do so out of its own, non-utility financed, funds. Separate accounting should not present a problem, but consumers do resent and should resent AT&T furthering its monopoly in the competitive market at their expense.

(e) After PriTec meets with a prospective customer, the customer often calls IBT for information on interface, and when the customer makes such an inquiry at least two IBT employees appear at the customer's office. These IBT employees have said to customers that "if you interconnect and you don't like the equipment or the service, we (IBT) may not take you back." They have also said, "Give us the PriTec proposal and we will analyze it for you." "If something happens to the lines, we will, of course, take care of IBT equipment customers first so you may be without lines for quite a while."

(f) The interconnect industry in general, and PriTec specifically, is justifiably proud of the innovative advances it has made in technology. The utility, lulled by its monopoly position and unwilling to step-up existing installations and obsolete stock-piled equipment has fallen behind the technology. Now IBT is responding, not by providing advanced equipment, but rather by offering to meet PriTec's advances and undersell PriTec. IBT has done this on a selective basis offering advanced features only to interconnect customers and prospective customers who have received PriTec's proposal. The utility does not tariff these features, as required by law, but rather offers them only to selective customers as it chooses and at rates not submitted to the Illinois Commerce Commission. Prospective PriTec customers calling IBT for interface information are immediately approached by IBT personnel. These IBT marketing employees have made statements that "whatever PriTec gives you, we will give you."

One PriTec prospective customer related the following incident: This prospective customer had been in communication with PriTec and had a special need which PriTec equipment could meet. The customer wanted the ability to place a call to Los Angeles and another to New York and conduct a conference between Los Angeles, New York and Chicago. PriTec was able to provide this conference by arranging pushbuttons so that when two buttons were pressed the conference call could take place. An IBT representative said "if PriTec provides that service, IBT will sue you (the customer). That is an illegal use of our lines; but if you really want that conference call capability, we, IBT, will install it for you." And IBT did install that system

with the conference call capability and did so at a lower price than PriTec had quoted. PriTec, of course, lost the prospective customer. It should be noted that there is no tariff provided for such a conference capability.

The same customer had need for a direct station transfer of an outgoing call. That is, when the customer placed an outgoing call, it wished to transfer that call to another office so that the outside recipient of the call could talk with other employees of the customer. PriTec has equipment for such a direct station transfer of an outgoing call. IBT had not furnished such a feature on anything other than Centrex equipment, but IBT did furnish the direct station transfer to the potential PriTec customer and again furnished it without a tariff. IBT obtained what it calls a "special authority" which is specialized permission from the Illinois Commerce Commission made on an *ad hoc* basis. That is, IBT goes to the Illinois Commerce Commission and advises them, *ex parte* and without public notice, what it wishes to do for a particular customer and receives an "okay" for that customer.

(g) A PriTec customer considering entering into a PriTec contract, advised IBT. IBT by letter (not on letterhead stationery) understated the charges which it would make for a similar system. The understated charges were not in accordance with the tariff and after IBT system is installed, the charges were increased to the amount of the IBT tariff.

(h) PriTec had repeatedly requested that it be listed under the caption "telephone companies" in the yellow page directory, but the telephone utility, through its publisher, Reuben H. Donnelly, had refused to list PriTec under that heading. It did, however, list its own equipment in the yellow pages under the heading, "telephone companies" and from time to time listed other equipment companies, but not PriTec. It insisted that PriTec be listed only under a heading entitled "telephone apparatus."

(i) When PriTec has contracted with a customer for a system pursuant to a contract, it finds that IBT will take generally four weeks to install the interface device. They uniformly have "technical problems" in installing the device. IBT requires that the interface device itself be provided by IBT and the customer must pay a monthly charge to IBT for the interface it provides. IBT has been installing "STC" interface devices manufactured, not by Western Electric, but by independant manufacturers including Elgin Electronics Incorporated, a subsidiary of Basic Incorporated, Walnut Street, Waterford, Pennsylvania 15441, (814) 796-2601. IBT has stated that it cannot provide "STC" interface devices without a seven to eight week delay because of the manufacturer's production and supply problems. This means, of course, that a PriTec customer is delayed in his cut-over to PriTec equipment because under present conditions, the equipment may not be "hard-wired" but must be wired to an interface device and then from the device to the utility lines. Mr. Harlow offered to place the orders for the Elgin Electronics STC interface himself as PriTec customers need them in that he was assured that Elgin was ready, willing and able to provide prompt delivery. IBT refused to allow this even though there was no question that PriTec and IBT would receive the identical device. Without any explanation the "delays" as to STC interfaces have continued to the harassment of PriTec customers. We have observed some improvement of late.

(j) PriTec and its customers have been plagued with faulty interface devices and IBT service of them. The regularity of this problem indicates a moivation to discredit interconnect rather than mere incompetence.

For example, one PriTec customer has ten consecutive phone numbers and the numbers were supposed to "hunt" automatically (hunt means that when a call comes in line 1, and line 1 is busy, it automatically transfers to line 2, etc.). Shortly after the equipment was installed, the lines simply did not hunt. When an outside call came into this customer's switchboard, the line did not hunt and the outside caller did not receive a busy signal. Instead, the calling phone had a ring tone as if no one was there to answer it but, of course, there was no ring in PriTec customer's building. PriTec sent out its technical people who stayed on the customer's premises on a 24-hour basis over the weekend and finally ascertained that the problem was in the Bell equipment and that Bell equipment did not hunt beyond the 4th line, did not give a busy signal but just provided a ring tone to the caller. The problem was pinpointed to one interface device, but the interface device worked in-

termittently so that sometimes the call hunted to the 10th line and sometimes it did not.

Another PriTec customer encountered an unusual amount of static on its lines and PriTec communicated the problem to IBT as the static was caused by utility equipment. The IBT representative investigating the static "discovered" that PriTec's customer had not been correctly billed by IBT since its initial installation and back-billed the customer *for nine years*.

Another PriTec customer was assigned a sequence of telephone numbers by IBT for its new location. The customer proceeded to have stationery and forms printed showing its new number. After it had gone to considerable expenses, The IBT advised the customer that the assignment of numbers had been an IBT error and gave it new numbers.

IBT has arbitrarily fixed the location of interface devices at a site on customer's premises which had no AC current and the location was far from the equipment. In fact, IBT had installed blocks in the aisles of the customer's warehouse, which IBT has since acknowledged as being a dangerous location and which IBT has moved. Notwithstanding the removal of these blocks, however, the interface devices are still inconveniently located. PriTec, its customer and IBT personnel arranged a meeting at the customer's location to discuss the placing of the interface devices. Notwithstanding the fact that PriTec had a contract with the customer and IBT knew it, the IBT representative at that meeting again sought to induce the customer to breach its contract with PriTec.

Similar interference with PriTec customers and improper IBT service to PriTec customers have occurred regularly in the course of PriTec's business.

3. PENDING ILLINOIS COMMERCE COMMISSION MATTERS

PriTec has participated as petitioner and complainant in several matters before the Illinois Commerce Commission. IBT files tariffs, often more than one per week, and PriTec's sole notice of the filings is the legal notice appearing in daily Chicago newspapers. Tariffs are not published in the press, but when a notice is filed, PriTec must obtain the tariff in its entirety by filing a request with the Illinois Commerce Commission in Springfield. The Illinois Commerce Commission then advises, by mail, the number of pages in the tariff and makes a photocopy charge and the tariff is sent to PriTec. Once it receives the tariff, PriTec must start the difficult task of interpreting it and translating the IBT terms to determine if and to what extent the tariff may be adverse to PriTec's position. Unless a petition to suspend is filed with the Illinois Commerce Commission within thirty days *and* unless the suspension is granted, the tariff goes into effect on the thirtieth day. Many of these tariffs vitally affect PriTec's business and even its ability to survive in business at all.

PriTec has engaged in Illinois Commerce Commission proceedings, but these are burdensome in terms of time and effort and expenses, both for attorneys fees and costs such as transcripts. IBT, which has a staff available for tariff prosecution, simply passes on its expenses to the customers as to whom it occupies a monopoly position as to lines. The following is a brief summary of Illinois Commerce Commission cases in which PriTec has participated. Because these are pending matters, PriTec will limit its comments to descriptions of the proceedings and where briefs have been filed summarizing facts and issues involved, those briefs have been enclosed.

(1) I.C.C. Dockets Numbers: 57368 and 57395

In April 1972, IBT filed a tariff proposing a \$.400 per line per month surcharge for trunk lines with touch tone capability if, and only if the lines terminated in customer provided, i.e. interconnect, equipment. After extensive hearings, the Commission held the tariff discriminatory and disapproved it. IBT was allowed to restructure its rates and it reduced its equipment rates and added the \$.400 per line charge for its customers and interconnect customers as well. The \$.400 charge was considered excessive and the Commission ordered IBT to file a cost of service study in support of it within six months. When the six months ended without IBT's filing, PriTec made inquiry and then a one-page, and, we contend, non-responsive paper was filed by IBT purporting to justify the charges. PriTec moved the Commission to strike the lines charge as unsupported. The March, 1973, decision and the

Motion to Strike, IBT's letter response and PriTec's Reply are attached as Exhibit 1 a-d to this letter. The Motion is, at this writing, still undecided.

(2) I.C.C. Docket Numbers: 58455 and 58472

In July, 1973, IBT filed a tariff seeking the Illinois Commerce Commission approval for its entry into the new business of providing Loudspeaker-Paging Systems. PriTec and Communications Systems Contractors Association oppose the tariff as discriminatory and anticompetitive. Our position is that the Commission has no jurisdiction to allow IBT to enter into loudspeaker-paging and that IBT seeks that approval in order to avoid the injunction issued against entry into new businesses in the United States Department of Justice antitrust case resolved by consent decree in 1956. The Motion to Strike for lack of jurisdiction, IBT's Response and cross-motions and our Reply are attached as Exhibits 2 a, b and c heretoo. The Motions are as yet undecided.

(3) I.C.C. Docket Numbers: 57903-57906

IBT filed tariffs seeking a general rate increase. IBT claimed that it needed additional funds and that it could not operate without substantial increases. PriTec, joined with other interconnect companies Allcom Inc. and Custom Communications, Inc. and intervened in the general rate case because, in the face of IBT's claims of poverty and its substantial increases to residence users (who do not have the alternative to go to interconnect) IBT substantially reduced rates for equipment which interconnect companies seek to compete. This cross-subsidization (increases for residents and lines to support decreases in competing equipment) was urged to be predatory. On December 21, 1973, the Commission decided to allow all of IBT's tariffs and although PriTec, Custom and Allcom, appeared throughout the eleven months of hearings, placed direct testimony and exhibits, cross-examined vigorously, filed briefs, and appeared in Springfield and presented oral argument before the full Commission, neither their participation nor the matters they raised was even mentioned in the decision. A copy of the post-trial and the Commission's order are attached as Exhibits 3 a and b. The interconnect companies are now deciding what, if any, steps can be taken as to that decision.

(4) I.C.C. Docket Number: 58102

IBT filed a tariff with the Commission for new, and lower, rates for PBX (switchboard) features already provided under existing tariffs at higher rates. Therefore, IBT has alternative rates, contemporaneously in effect, for identical service. PriTec, Allcom Inc., and Custom Communications, Inc. find that the lower rates in the new tariff are being offered on a selective basis to customers interested in interconnect. These companies filed a timely petition to suspend the tariff which was denied and filed a motion for reconsideration in March, 1973. That motion has not been decided. The case is going forward as a complaint to suspend the tariff and evidence is being taken. In the course of the hearings we have established that IBT sales personnel had been offering the PBX alternative rates to our customers and potential customers many months before the tariff was even submitted to the Commission. The motion to suspend the tariff is submitted as Exhibit 4. The motion and case are as yet unresolved.

(5) I.C.C. Docket Number: 58351

PriTec and Custom Communications have filed a complaint charging IBT with quoting and making duplicative charges for lines where interconnect customers are involved. This is charged to be anticompetitive and discriminatory. The parties are presently putting in their evidence before the Commission.

CONCLUSION

In conclusion then we believe that Private Tele-Communications, Inc. is well qualified and able to provide the benefits of competitive equipment for interconnection, but the PriTec has met unwarranted and, we believe, unlawful, harassment, discrimination, and a whole range of anticompetitive conduct including discrimination in lines charges and predatory pricing. PriTec has actively sought to protect its right to compete and has participated in actions in regulatory agencies. To date, the results have been frustrating and PriTec can only foresee further skirmishes at the Illinois Commerce Commission, at great expense, or an antitrust suit at even greater (and what appears to be prohibitive) expense.

We therefore state again our gratitude for the interest you have shown and our hope that the senate will find a constructive solution which will allow the American people the benefits which inhere in free and fair competition in telephone interconnect as in other fields of enterprise.

Mr. Harlow has substantial documentation to support the charges contained in this letter and he will be happy to testify before your committee. Please advise us if we can provide further information as we are desirous of cooperating.

Yours very truly,

BARBARA B. HIRSCH.

NATIONAL TELEPHONE SYSTEMS, INC.,
Newton Highlands, Mass., January 8, 1974.

Mr. JOHN W. COUGHLIN,
Director of Telephone Division,
Department of Public Utilities,
100 Cambridge St., Boston, Mass.

DEAR JOHN: The attached chronology depicts the gross inefficiency and negligence of New England Telephone and Telegraph Company in performing service on their equipment associated with an interconnected telephone system. Our many customers consider this method of operation by New England Telephone Company as harassment. Although the New England Telephone Company's policies causing this type of action were not necessarily written to cause harassment of interconnect customers, this is clearly defacto harassment.

The enclosed history shows that New England Telephone Company apparently wasted hundreds of dollars of its subscribers money in their utterly inefficient practices and negligence in servicing our system. I expect that their account practices would post these costs against "expenses involved in providing services to interconnect customers" instead of "expenses involved in the repair of unreliable New England Telephone Company's property by untrained personnel." The first category would clearly put interconnect into a totally unfair light when rate base accounting entries are made.

Very truly yours,

ROBERT T. SCHWARTZ,
President.

HISTORY OF A TELEPHONE COMPANY SERVICE CALL DECEMBER 17, 1973 THROUGH JANUARY 3, 1974

Dec. 13, 1973—Discovered that incoming calls were not being received on our fifth hunting incoming line. Could not tell how long condition had existed. Tested interface device (STC) and found it inoperative on incoming ringing.

Called New England Telephone Company Repair 611 and reported defective STC unit. Was called back by New England Telephone Company's test board and told to call my "interconnect supplier."

Told test board that problem was their equipment, not ours and asked that the STC be replaced.

Dec. 17 or 18—Called 611 again and reported that no repairman had arrived yet.

Dec. 19—Also reported again. New England Telephone Company repairman arrived on different problem. Didn't touch STC.

Dec. 20—Called 611 again.

Dec. 21—Repairman arrived without bringing new STC. He admitted that he could do nothing since he didn't know how to repair STC's or how to get one.

Dec. 26—Called John Dunphy, New England Telephone Company's Plant Department for help. Wrote letter to Massachusetts Department of Public Utilities regarding matter.

Jan. 3, 1974—Received note in mail from New England Telephone Company stating that repairman had arrived on January 2, 1974 and found no one in. We had been open from 8:30 a.m. to 5:30 p.m. on January 2, 1974.

Called 611 and told them to get a new STC over immediately. Repairman arrived about 10:30 a.m. without new STC. Called John Dunphy's office. He

wasn't in but I spoke to Mr. Coleman. Mr. Coleman spoke to New England Telephone Company's repairman apparently informing him where to get replacement unit. Repairman left.

Repairman returned with supervisor but no STC. They left.

Repairman returned with new STC and replaced defective unit. Repairman left.

Another New England Telephone Company employee stopped in to see if repair had been made and then left.

Total Time Elapsed—Report to repair—approximately 500 hours.

NORLING, ROLLE, KING & OESER,
LAW OFFICES.

Phoenix, Ariz., January 10, 1974.

C. WEBB CROCKETT, ESQ.,
100 West Washington,
Phoenix, Ariz.

DEAR MR. CROCKETT: This firm represents *Inter-Tel Incorporated*, an inter-connect company operating in Arizona and Colorado. It has come to our attention that certain employees of Mountain States Telephone & Telegraph Company in Arizona have taken actions on its behalf, which, in our opinion, are violations of the Federal and State Anti-Trust Laws.

In September 1973, Mr. Dick Davis of Inter-Tel was contacted by Jerry Ackman from Realty Executives to make arrangements for Inter-Tel to transfer Realty Executives' twelve instrument touch tone system from its Paradise Valley office to its new commercial office building at 4560 North 19th Avenue. Mr. Davis contacted Carol Senese and Mr. Graves of Mountain Bell to ascertain the availability of exchanges 248, 264 or 263, which were the only exchanges capable of handling the electronic features desired by Realty Executives. Mr. Davis was informed by Ms. Senese and Mr. Graves that these exchanges were not available and that touch tone was also not available for Realty Executives at their new office.

On September 21, 1973, Realty Executives received a letter from Carol Senese assigning the new telephone numbers of 277-6871-6872 and 6874. Mr. Ackman immediately called Ms. Senese for an explanation. She informed him that although every effort was made to obtain a 264 exchange, there were no lines available at this time and none would be available until after February 1974. She also stated that the Inter-Tel touch tone system would not be workable in the new office as there was currently an embargo on touch tone availability.

In the following weeks, both Realty Executives and Mr. Davis of Inter-Tel made additional requests to obtain the 264 exchange and touch tone availability, but to no avail.

On October 9, 1973, Mr. Ackman again contacted Carol Senese at 4:15 P.M. and was informed that Realty Executives' order was on hold as requested by Mr. Davis as there were no 264 numbers available and that there was still an embargo on touch tone systems in that area. At 4:19 P.M. on the same date, Mr. Ackman called Mountain Bell as an unidentified customer desiring information on new telephone service for 4560 North 19th Avenue. Mr. Larry Clayton of Mountain Bell was most cooperative and eagerly accepted the order for a touch tone system with the 264 exchange. Mr. Clayton stated that he would see if he could get clearance for the 264 exchange and touch tone availability. He called Mr. Ackman back on the same day and stated that the Mountain Bell System with the 264 exchange and touch tone availability would be installed by Friday, October 12, 1973. The system was installed on October 12, 1973, and was in working order by October 17, 1973; this was the same system which Realty Executives had requested for several weeks through Inter-Tel and was unable to obtain.

On October 23, 1973, Mr. Davis again contacted Ms. Senese and inquired about the status of the request for Realty Executives. He was informed that neither a 264 exchange nor touch tone was available. It is apparent to us that Mountain States Telephone & Telegraph Company was willing to provide services for those persons willing to use its equipment that it would not provide to those using equipment of Inter-Tel, Incorporated. In our opinion, such action clearly violates Section 3 of the Clayton Act, Section 2 of the Sherman Act and is a restraint of trade.

I am writing this letter to you to be forwarded to Mountain Bell management in Arizona and Colorado with the hope that Mountain Bell will not continue to discriminate against Inter-Tel, Incorporated. If such conduct does continue, we will take whatever appropriate action is necessary to protect the interests of Inter-Tel, Incorporated.

Very truly yours,

JOHN C. KING,
FOR NORLING, ROLLE, KING & OESER.

SCAUTUB INSURANCE AGENCY, INC.,
Schenectady, N.Y., January 23, 1974.

Mr. GERALD HELLERMAN,
Special Financial Adviser,
Senate Subcommittee on Anti-Trust & Monopoly,
Senate Annex,
Washington, D.C.

DEAR SIR: Regarding the New York Telephone Company's alleged anti-competitive practices, here is a documentation of a recent occurrence.

Our insured, John A. James, has been insured with our agency since August 1969. During February or March of 1973 Mr. & Mrs. James came to our office and stated they were building a new home. They wished to inquire about protection on their new dwelling, so I discussed coverage with them and quoted rates. Mr. & Mrs. James decided on the coverage they wanted and said they would notify me when the home would be completed and the coverage was to be made effective.

After some months, when I did not hear from them, I called the James home and spoke with Mrs. James. She informed me that they had purchased coverage on their new home from another agency. Naturally I inquired as to the reason. Mrs. James told me that a list of the names of firms that do not use New York Telephone equipment was circulated among Telephone Company employees, and they were urged not to do business with any of these firms. Since our agency does not have New York Telephone equipment, the James bought their policy elsewhere.

This documentation, to the best of my recollection, describes the facts of this event.

Respectfully,

WILLIAM E. WALSH.

SCAUTUB INSURANCE AGENCY, INC.,
Schenectady, N. Y., January 7, 1974.

Mr. HILTON P. DANA,
Regional Vice President,
United Telecommunications Corp.,
1843 Central Ave.,
Albany, N.Y.

DEAR MR. DANA: Please be advised that it has been brought to the attention of one of our sub-agents that the New York Telephone Company is circulating a list to their employees of those firms that have elected to purchase the United Telecommunications Corp. phone systems.

The New York Telephone employees are urged not to do business with any firm not on the New York Telephone system. Our insured, Mr. John James, is an installer for New York Telephone, and had agreed to purchase a homeowners policy on a dwelling that he had under construction. In attempting to make contact with Mrs. James, in order to obtain policy information for issuance, Mrs. James informed our sub-agent, Mr. William Walsh, that they have purchased coverage elsewhere in view of the afore mentioned list publication.

I sincerely hope this information will be helpful to both United Telecommunications and your customers in enabling your firm to combat this unfair trade practice. If we may be of further help—please advise.

Sincerely yours,

JOHN T. HEALEY,
President.

TELECOMMUNICATION ASSOCIATION OF NEW JERSEY,
West Paterson, N.J., February 14, 1974.

SENATE SUBCOMMITTEE ON ANTITRUST & MONOPOLY,
Washington, D.C.

Attn: Mr. Gerald Hellerman.

GENTLEMEN: Enclosed is a copy of an article which appeared in the February 4th issue of "Telephony" detailing various advertisements used by the operating companies of American Telephone & Telegraph. The Telecommunication Association of New Jersey takes exception to this advertisement campaign, both in New Jersey and nationwide. We believe that it is illegal to finance this campaign out of revenue received from rates stipulated in the tariffs.

I feel that you should be aware that ads, such as the ones enclosed, appear weekly in all national publications; and in New Jersey, each small weekly or monthly publication. The cost of a page in "Business Week" is approximately \$12,000.00 and is the same for "Time", "Newsweek", etc. I have had estimates from an advertising firm that this campaign is costing about \$1,000,000 per week. This is absurd to have the public pay for anti-competitive policies.

American Telephone & Telegraph had higher profits and earnings in 1973 than ever before in its history. At the same time, they asked for and received tariff rate increases of between three and twelve percent. The New Jersey Public Utilities Commission, long a friend of New Jersey Bell Telephone, set a precedent by even allowing New Jersey Bell Telephone an automatic 2.5% across-the-board rate increase without having to submit to open hearings. At the same time, New Jersey Bell Telephone has lowered rates for equipment used in commercial accounts so they can compete with private communication companies. To allow this to continue is criminal.

If the business they have isn't profitable, why spend millions advertising for more? If they need large rate increases, why cut rates on equipment? If they are concerned about the national network and the good of the public, why set up in-house seminars which they call "The Enemy School" to educate their employees on how to compete in any way possible with the private communication companies? And how do they justify such huge profits?

I also enclose an article by Robert Feiner, President of Phonetele, for your information. This Association will not let these actions by New Jersey Bell Telephone continue without refuting them. I bring them to your attention for your information.

Yours very truly,

MARTIN F. McDERMOTT III,
President.

Bell System advertising takes strong competitive stance

Advertising works hard to back up sales force; MCI makes an issue of it

Leo Anderson, Editor

AMERICAN TELEPHONE & Telegraph Co., or more particularly its Bell System operating companies are taking a decidedly more aggressive stance in their advertising these days than they have in the past. The reason is the new competition. And the new competition definitely does not like the new advertising.

The ads talk about new hardware that can better serve the customer. They challenge the "savings" touted by the telco's competitors. They talk about maintenance and dependability. They do these things in no uncertain terms.

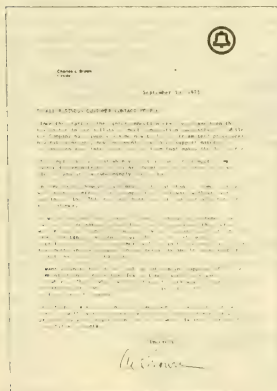
The ads shown on these pages indicate the approaches Bell System advertising is taking. While the AT&T ads at the top of this spread

are less "hard selling" than the operating company ads at the bottom, there's still no doubt that they are driving hard to help build sales of revenue-producing services. H. Allen Carroll, AT&T advertising director, confirmed this in a conversation with TELEPHONY and added: "We're expecting an even greater return for our advertising budget than before."

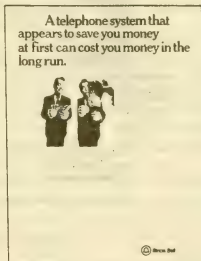
One reaction to the Bell System advertising has been a move by MCI, one of the new specialized carriers, which petitioned the Federal Communications Commission to alter AT&T's advertising program. The move was viewed by most in the telephone industry as one of vast effrontery. What MCI was asking was

that its competitor—the Bell System—be required as part of a new "fairness doctrine" to pay for the presentation of "opposing viewpoints" in the same advertising media as Bell was using. The rule was needed, MCI said, because without it Bell could use its advertising to "stifle the growth of new, lower-priced competitors."

AT&T answered that MCI's "ill-

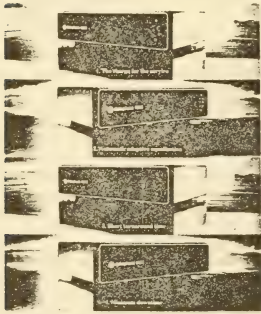


LETTER from Illinois Bell President Charles L. Brown was part of a package of ad preprints that went to sales force.



ILLINOIS Bell ads tell how interconnect savings vanish.

Bell System Dalaphone 4800 Service cuts your costs 4 ways.



A new generation of PBX's from the Bell System.



AT&T ads running in general business magazines point to new products that will provide greater efficiency to communications users.

conceived and unsound proposal should be rejected forthwith" because it is unworkable, unfair, unconstitutional and uncalled for. The FCC has yet to act on the petition.

Meanwhile, interconnect companies are pushing hard at the local level through advertising and sales efforts to move in on Bell. Their ads stress new features and lower prices. The Bell operating companies' ads

are designed to counter these arguments.

Ad Director Carroll said it was difficult to determine, in terms of sales, just what kind of a job the ads were doing, but the sales force's morale definitely is being bolstered by the advertising back-up. Additionally, he said, the advertising helps solve the problem of the silent ex-customer, in which the telephone

company doesn't know the customer is unhappy until an order comes in to remove the telco equipment.

The ads, said Carroll, have reduced by half these cases that are lost without a contact. And when you stop to consider that the telephone company wins out eight out of ten times when it goes up against an interconnect outfit, that's a pretty good sales accomplishment. □

**You're hotel experts.
We're communications experts.
Let's get together.**

© Bell of Pennsylvania

BELL of Pennsylvania based on the fact that hotel men

Before you sign any contract, call this number.
(212) 395-6666.
 It will put you in touch with a New York Telephone Communications Consultant.

© New York Telephone

NEW YORK TEL seeks better customers to communicate.

The time to think about maintenance for your communications equipment is

before you sign on the dotted line.

© Bell of Pennsylvania

MAINTENANCE is stressed in this ad. AT&T has a similar one.

TELEPHONY • FEB 4, 1974

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[From Communications News February, 1974.]

TSK . . . TSK . . . TSK . . . MA BELL

(By Robert L. Feiner, President, Phonetele, Inc.)

"We hear you" say AT&T ads. And what AT&T hears is a revolution of subscribers liberated from the yoke of its autocracy, a tyranny that has been heretofore unwilling to respond to their needs.

Interconnection has changed AT&T's attitude, and now having alienated so many subscribers AT&T, like a toothless lion, bellows in empty halls—"We hear you." But who and how many hear the Bell's ring when so many are beyond earshot?

To leave the fold of Ma Bell becomes heresy, a form of un-Americanism, a bewildering incredulous experience for her. No dictator, however benevolent, can ever understand his subject's desire for freedom, in this case freedom of choice. No amount of fear mongering by AT&T will forestall the exodus, because interconnect is freedom, and despotism is dead.

In unison across the land the feudal lords leading the Bell companies echo the litany of their demagogic Lord of Lords—"the network will be harmed" and "service will deteriorate" and "residential telephone bills will rise" and "competition is bad." And so the "Big Lie" propaganda goes on. USITA is but an echo, and NARUC, who is charged to serve as a bastion between the monopoly and the consumer crumbles like a sand castle before a tidal wave. Who serves whom? What is the truth?

"Support your allegations of harm and network deterioration" says the FCC to AT&T, and they have not, because they cannot. Said the United States Department of Justice in the North Carolina case:

"There is no reason for believing that allowing the interconnection of customer-supplied equipment would have an adverse impact on residential rates."

Said the California Public Utilities Commission in its recent Order Instituting Investigation on certification:

"It may be argued that to allow direct interconnection of customer-provided equipment in lieu of that equipment traditionally furnished by the telephone utility will disturb the revenues of the regulated utilities creating the potential for a restructuring of all rates and charges. If and when such a result should occur there are sufficient procedural remedies available to insure that rates for service by the utility are properly and reasonably maintained."

The "truth did out" for but a brief moment, because the repentant CPUC, no doubt admonished by NARUC for having espoused heresy, was reluctant to stand on the truth, and so endeavored to expunge it by a subsequent order.

And how does the subscriber feel about interconnection? In the January 1974 issue of Communications News, Managing Editor Ken Bourne wrote about a dramatic case of interconnection. The subscriber involved is the average tax-paying citizen in Los Angeles County—the facility, their tax supported USC Medical Center. The article described how the Phonemaster restriction system facilitated more efficient trunking by imposing dialing controls, and is saving the County almost one half of its \$70,000 monthly usage bill against an equipment cost of \$50,000. Pacific Telephone had nothing comparable to offer and so the County went interconnect with Phonetele, Incorporated on this portion of their system.

Taking the annual savings at the Center of an approximate amount exceeding \$360,000 and capitalizing it at a nine-percent rate of return, Pacific Telephone has been "ripping the County off" at this one facility to the tune of \$4,000,000. Thanks to interconnection, the County just received a \$4,000,000 "credit." As to Pacific Telephone, one feels more pathos than anger.

The fact that Pacific (and the Bell System) does not provide a restriction system truly comparable to the Phonemaster is gross negligence. It has long been Phonetele's contention that the carriers have accrued substantial subscriber liability in having, by intent, failed their monopoly responsibility to provide effective equipment when such technology has been available for many years, and that the carriers could, in a class action lawsuit, be justly caused to rebate all misuse to subscribers for those many years. Pacific, et al, never provided restriction equipment for key systems.

There is nothing to mitigate their position, because providing restriction equipment of any type has been contrary to their marketing policy unless it was on a demand basis. Reducing telephone misuse, while benefiting the subscriber, hardly inures to the benefit of the telephone company, it would appear. In other words, the subscriber be damned! Such a policy by a monopolist is bankrupt: it is immoral, and it is criminal. The example of the County installation is a most willful act bordering on felonious grand theft. This is no ordinary subscriber. This subscriber is the people, some 6,967,000 Los Angeles County citizens.

But even overshadowing the immoral or "criminal" aspects of this situation is the shortsightedness and rank stupidity that arises from the leviathan "state" that is the Bell System. Surely the \$13,000 monthly message unit misuse at the County is based upon cost-related charges. Is not that sum the total of cost and rate of return, and therefore does not the restructured County system also effect savings back to Pacific? In other words, the County saved \$13,000 and Pacific lost its rate of return incorporated in that amount, and itself saved the difference, or should have.

Tolerating the long-distance misuse was aiding and abetting grand theft by a multitude of unauthorized users. The telephone company effectively con-

spired with unauthorized callers to "steal" thousands of dollars from the taxpayers. Pacific opened the County's coffers to wrongdoers and profited by it. They could have closed the lid and locked it, but they did not, thus sharing ill-gotten gains. What piracy!

Is revenue so dear and rate of return so sacred that Pacific could willfully and knowingly tolerate such a situation? Apparently so because the County situation was only rectified with the advent of interconnection. Perhaps this situation is what John deButts meant when in his recent address before NARUC he called for a "moratorium on further experiments in economics." And perhaps this is why AT&T has defacto foreclosed Phonetele from doing business outside California to the date of this writing by failing to provide connecting arrangements, notwithstanding the fact that direct engineering liaison was initiated by Phonetele over three years ago—an unconscionably long time, and an act most suspect of willful and calculated omission. The Bell companies violate with impunity the tariffs they have promulgated by not providing the connecting arrangements they purport those tariffs demand, and do so with imperious indifference. Probably the only reason Phonetele has been able to do business in California is because of one long, three-year, bare-knuckle, eye-gouging, screaming-and-kicking, rumble-tumble, spitting-and-cussing battle that has been carried by Phonetele through the Public Utilities Commission all the way to the State Supreme Court, in quest of justice before the law.

And perhaps this County situation is what Commissioner Edward Larkin of the New York Public Service Commission would call "wicked" as he labeled interconnection generally; "morally wrong and likely to cause harm or trouble" he defined it. But this is *not* what Ben T. Wiggins, the President of NARUC, meant when he said "We must, at all costs, protect consumers against exploitation." He was speaking *against* interconnection at the USITA Convention, not for it. Interconnection is not "skimming the cream off the top" as he says, it is revealing the scum of wrongdoing.

This is not to say that Pacific deliberately went into the Center and, by plan, created the situation. One could not attribute to them either such malice or grant them such intelligence. Rather, it is due to the composite failure of a "system," a corporate malaise with little hope for redemption.

To dislike Bell System people, that is seldom possible—but the "system" itself, that is another matter. A "system" cannot be tried for collective immoral, illegal, or stupid acts, especially when they are perpetrated under the aegis of "regulation," and condoned by an impassive, submissive subscribing body, gripped by a paralytic fear, prostrated before the awesome presence that is Ma Bell. Ma is not to be antagonized because, controlling the jugular of telecommunications, she holds captive the entire fortunes of a business enterprise. The corporate consultants are properly contrite, partly because management does not support them. They tolerate all sorts of abuses when they should demand of Ma Bell her proper role of servitude, as a monopoly regulated by the people to serve the people.

To pay Ma one dollar in misuse when equipment is available to prevent it is unconscionable cowardice. Rebellion is the order of the day. After all, whose money is at stake? The burden is on Ma Bell to provide the means for stopping misuse or pay its cost. But, there will be no rebellion, the subscriber is a coward, and Ma will collect her tribute, ad infinitum.

In her own interest she should provide restriction systems to facilitate a more efficient use of her network. Misuse creates inefficiency that is a waste of an important national resource—the enormous central-office capital equipment investment.

The number of similar subscriber cases involving sizable misuse are legion. Even the County is held captive in numerous other locations because it is burdened with Pacific's equipment, secured in place by basic termination charges. The County taxpayers are economically foreclosed from alternatives by an unfair competitive practice that retains an unreasonable hold on the market place for as long as five years. In the IBM-Telex case, such leasing

tactics were held to be unlawful as an unfair competitive practice. The County cannot make a free choice with the availability of a new offering without paying prohibitive penalties. In other words, the taxpayers must go on paying more and getting less because a monopolist won't release them from an economic stranglehold. "We hear you" they say! What is it that AT&T hears?

It is such real or imagined abuses that contribute to ours being a capitalistic economic system, a system which embraces a policy of free competition as the most effective means of providing the best goods and services, to the largest body of people, at the lowest possible prices. Monopoly is condoned only where essential and only then under regulation. However, it is sheer fantasy too suggest that AT&T and her affiliates are in any way subjected to the degree of regulation that their size and power demand. The situation at the County is a dramatic example of that. The budgets of regulating bodies are too frequently too small to ever effectively do their jobs.

Regulated monopoly is essential as far as the very basic telephone network is concerned but there remains absolutely no evidence that it is essential where telephone equipment on a subscriber's premises is concerned. Government should only govern where essential and it should not perpetuate itself by perpetuating a monopoly over the interconnect market place. Government should not substitute itself for the dynamism of free competition; rather it should exert itself to cause AT&T to divorce itself methodically from the keeping with the spirit, if not the letter of present-day antitrust laws.

Interconnection will merely deny the telephone companies rates of return on situations where the subscriber can do better by going interconnect. The telephone companies will be compelled to compete and become cost-efficient like any other business enterprise. The day may come when we will no longer hear that 20 percent of the people do 80 percent of the work. Interconnection will force the telephone companies to "squeeze the fat" out of cost. What efficiency can there be in granting a regulated rate of return on unregulated costs?

The idea advanced by Ben T. Wiggins that price performance has been "achieved without government subsidies" is unobservant. Government regulators have been granting endless subsidies in the form of adding a regulated rate of return to unchallenged and unregulated costs, and then "taxing" the subscriber in the form of higher tariffs. That is not "performance"; it is perfidious. Who would ever believe that the conservative managements of the telephone companies and their conservative regulators would be practicing such thinly veiled socialism? They are at the public trough for subsidies and they should never forget it.

A company such as AT&T cannot carry the mantle of size and monopoly power without being subjected to a great deal of criticism, some of it just and some of it unjust. It is a gigantic bureaucracy. Like government, it can become an uncontrollable system of men who can do little to effect change. There are those among management who would bring change. They must be called enlightened; they are refreshing, too few, and tread a perilous path in their careers.

We have a great telephone system in this country and the finest telephone system in the world. The credit belongs to AT&T and it is richly deserved. However, the best does not mean that it cannot be better, and it will be better because the greatest beneficiaries of competition will, in the final analysis, be the telephone companies themselves.

TELECOMMUNICATION ASSOCIATION OF NEW JERSEY,
West Paterson, N.J., November 7, 1973.

MR. GERALD HELLERMAN,
Senate Subcommittee on Anti-Trust and Monopoly,
Washington, D.C.

DEAR MR. HELLERMAN: I am in receipt of Senator Hart's letter of October 29, 1973. The Telecommunication Association of New Jersey has been formed

by an alliance of consumers, users of private communication equipment, and companies in the interconnect, intercom and sound business. The reason for the association is threefold:

1. New Jersey residential subscribers are subsidizing the present low commercial and business rates. This means that New Jersey Bell Telephone, in order to compete with private-communication companies, lowered business rates while increasing residential rates. We believe this practice to be illegal.

2. Users of private communications equipment are deliberately intimidated, and given poor service by New Jersey Bell Telephone. They are concerned, for they are not receiving the service from the utility for which they pay.

3. The private communication companies understand very clearly that AT&T intends to exterminate them. If these firms go out of business, who services the thousands of private users?

You have requested assistance and in whatever way possible the Telecommunication Association of New Jersey will support you. This association is six weeks old. There is much to be done. Believe me when I say that AT&T has every block covered but one, and that is public indignation! We will provide you with all copies of correspondence relating to AT&T unfair practices. We will testify if asked, and if you require any expertise from the private telecommunications field, this will also be provided.

This is not a short term project either of us have undertaken. Friends of mine at AT&T smirk when I tell them what the Association is attempting. You may tell the Senator that you have my personal support, the support of Telephone And Sound Sales Co. Inc., and of the Telecommunication Association of New Jersey. I look forward to our future association.

Yours very truly,

MARTIN F. McDERMOTT III,
President.

DUB MILLER FORD, INC.,
Rosenberg, Tex., February 19, 1974.

Mr. GERALD HELLERMAN,
*Senate Subcommittee on Antitrust and Monopoly,
Senate Annex,
Washington, D.C.*

DEAR MR. HELLERMAN: I believe the attached document is the type of information you are seeking. It documents a recent case where a Bell Telephone Co., employee called our wrecker to tow his truck to our Service Dept., for repairs. Another employee of the Phone Company arrived at our Dealership about the same time as our wrecker and requested we deliver their truck to a shop that was a customer of theirs.

It is my feeling they did this because we happen to own our phone equipment. The reasons we do are many. To name a few, poor service, indifferent attitude and savings.

Our most recent bill from Bell was in excess of \$900.00 for line changes, yellow page advertising and etc. If this fails to meet their test as a customer I'd like to know what it takes.

There are many problems too numerous to list here. If you desire more information please let me know.

Sincerely,

J. W. MILLER,
President.

DUB MILLER FORD, INC.

24-Hour Wrecker Service

No 1316

5015 AVENUE H

ROSENBERG, TEXAS 77471

TELEPHONE 342-5611

Name Southwest Bell Co Date 2-6-574
 Address Roseburg Tex Time _____
 Phone _____
 City _____ Zip _____
 Make Ford Lic. No. EP 5155 Color white
 Model 1972 State 1972 Tex Vin _____

WRECKER SERVICE:

~~7/250~~
16.50

Day time

STORAGE: (Per Day)

Levin E. Kane 16.50
7/250

Auth. By _____

Date Delivered _____

Driver _____

Released To _____

Officer In Charge _____

Total Wrecker Service _____

Total Storage _____

Outside Work _____

Tax _____

TOTAL AMOUNT _____

PORT BEND PRINTERS

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23280



P. O. Box 912 5015 Avenue H.
Phone Rosenberg-Houston 342 5611
ROSENBERG, TEXAS 77471

DATE 2/6/74		LABOR CHARGE	
DELIVER YES <input type="checkbox"/> NO <input type="checkbox"/>		WASH <input type="checkbox"/>	
TIME REC'D		LUBRICAT ON <input type="checkbox"/>	
TIME FROM		CHANGE OIL <input type="checkbox"/>	
		CHANGE OIL FILTER CART <input type="checkbox"/>	
		CHANG E-ON <input type="checkbox"/> DIFF <input type="checkbox"/>	
		PACK FRONT SW. BEUL <input type="checkbox"/>	
		WASH TIRE <input type="checkbox"/>	
		ADJUST BRAKE <input type="checkbox"/>	
		BALANCE WHEELS <input type="checkbox"/>	
		STATE INSPECT ON <input type="checkbox"/>	
SOUTHWEST BELL CO. CITY Rosenberg PRESS 72 Ford OR NO 15155 METER NO. 15155 SPEEDOMETER 15155 CUST. ORDER NO. 15155 ORDER WRITTEN BY EST LABOR INSTRUCTIONS Wrecker Service 1650			
I authorize the above repair work to be done along with necessary materials. You and your employees may use above vehicle for purposes of testing, inspection or delivery at my risk. I agree mechanic's fee is charged on above vehicle to secure the amount of repair. I agree. You will not be held responsible for loss of vehicle or articles left in vehicle in case of fire, accident or any other cause beyond your control. My acceptance and the labor for this work shall be limited and voided by warranty for 4,000 miles or 90 days, whichever occurs first. PAYABLE IN ROSENBERG, FT. BEND COUNTY, TEXAS.			
RMS: STRICTLY CASH UNLESS ARRANGEMENTS MADE GAS GAS @ QTS OIL @ LBS GREASE @ AUTO TRANS OIL TOTAL GAS, OIL & GREASE		TOTAL LABOR TOTAL PARTS GAS, OIL GREASE ACCESSORIES TAX TOTAL AMOUNT	

DUB MILLER FORD, INC.,
Rosenberg, Tex., June 18, 1974.

Mr. GERALD HELLERMAN,
Senate Subcommittee on Antitrust & Monopoly,
Washington, D.C.

DEAR MR. HELLERMAN: In response to your recent visit and request for the following information about Bell Telephone Company, they have purchased \$678.33 worth of parts and service from us from October 4, 1972 to date. The last new vehicle we delivered them was on March 26, 1971 and I have no record of any request for quotations in the past two years.

My apologies for the delay in furnishing this information but I have had to be out of town a lot as well as have had some family illness.

Sincerely,

J. W. MILLER.

MID-WESTERN TELEPHONE, INC.,
Joplin, Mo., February 20, 1974.

GERALD HELLERMAN,
Senate Subcommittee on Antitrust & Monopoly,
Washington, D.C.

DEAR MR. HELLERMAN: On February 5, 1974 Mr. James E. Brown, attorney, First National Bank Building, Joplin, Missouri, was contacted by Mr. Paul Pearson, owner of Mid-Western Telephone. Mr. Brown was very interested in saving money on his phone bill. Mr. Pearson explained the economic advantages of interconnection (privately owned telephones), as well as some of the advantages of a total communications package. Mr. Brown was using a 'Bell Telephone Key System.

Several days later Mr. Brown called the Business Office of Southwestern Bell Telephone, Eighth & Pearl Streets, Joplin, Missouri. He inquired as to Bell Telephone charges for lines and protective devices, as he was considering owning his telephones. The Bell representative, whose name Mr. Brown has been unable to acquire, told Mr. Brown that (1) he could save little or no money, (2) he would be dissatisfied with his service, and (3) that he would be *legally liable for the damage his privately owned equipment would undoubtedly cause to the Bell switching network!!*

The result of this speech was that Mr. Brown decided against private ownership. As in so many other instances, Mr. Brown and his associates accepted Bell's word as law, and were unwilling to be legally liable for damage to a multi-million dollar network.

In this instance Mr. Brown was successfully insulated from interconnection, and is now using a single-line telephone.

We trust that some of these incidents will furnish your committee with evidence for need to "ride herd" on the antics of the major telephone companies.

Thank you for your efforts,
Sincerely,

PAUL L. PEARSON III,
Vice President.

MID-WESTERN TELEPHONE, INC.,
Joplin, Mo., February 20, 1974.

GERALD HELLERMAN,
Senate Subcommittee on Antitrust,
Washington, D.C.

DEAR MR. HELLERMAN: This letter concerns intimidating remarks made by a Southwestern Bell Telephone employee to Dr. Benjiman Rosenberg, of 2602 Picher Avenue, Joplin, Missouri. The Southwestern Bell employee is a patient of Dr. Roosenberg's and Dr. Rosenberg has requested that this person's (patient) name be kept confidential for obvious reasons.

In February of 1974 Dr. Rosenberg was contacted by Mr. Paul Pearson, Jr. owner, and Mr. Roland Boote, Sales Manager, of Mid-Western Telephone (an interconnect contractor). Dr. Rosenberg was presented with a MWT proposal for a privately owned telephone system. He (Dr. R.) took the proposal to his accountant who advised him to purchase his own telephone system.

It was then that Dr. Rosenberg mentioned his intention to purchase his own telephones to the Bell employee mentioned above. The Bell employee informed Dr. Rosenberg that he would see that it was well known that the doctor had "left" the Bell system, and that no Bell employee or their families would patronize Dr. Rosenberger thereafter!

This same employee, being aware that Dr. Rosenberg was constructing a new country home, told the doctor that if he "interconnected", he might find it difficult to get a private line (single party) at his country home. This Bell Employee further went on to say that Mid-Western Telephone was a "fly-by-night" operation and that their customers were all very dissatisfied with their service.

Fortunately, Dr. Rosenberg had known Mr. Pearson for a number of years, and also was acquainted with many people who owned their own systems, so

he knew these last statements to be false. He was, however, sufficiently worried about loss of clientele and his inability to procure a private line for his country home, to kill the sale. Needless to say, we are trying to persuade Dr. Rosenberg to release the name of the employee who so intimidated him.

This incident though unsubstantiated by a name, is FACT. It is not an isolated incident, it is only unusual in that Dr. Rosenberg knows us well enough to relate it to us.

PAUL L. PEARSON III,

Vice President.

MID-WESTERN TELEPHONE, INC.,

Joplin, Mo., November 5, 1973.

Senator PHILLIP A. HART, *Chairman,*
Subcommittee on Antitrust and Monopoly,
Washington, D.C.

DEAR SENATOR: We returned from Miami Beach where we were attending a meeting of NATA (North American Telephone Association) to find your very welcome letter. My father, Mr. Paul Pearson, Jr. was appointed to the budget committee and is at present in your city.

We assure you that there have been instances of very questionable practices on the part of "Ma Bell", but we agree that the best source of information for your committee is from the customers themselves; so we have forwarded copies of your letter along to our customers who complained to us of undue pressures, and will let them speak for themselves. You will be receiving notes from six or seven companies in our area in the near future. They include Leggett & Platt of Carthage, Missouri, Doane's of Carthage, Missouri, Central States Construction of Pittsburg, Kansas and Reverend Stahls of World Headquarters of the Pentecostal Church of God in Joplin, Missouri to name a few which come to mind.

If there is anything further we can do please let us know at any time. Had this letter reached our office a bit sooner, Mr. Pearson might have had time to come by and visit a bit while in Washington. Please do continue your efforts for there is need in this area.

Cordially,

PAUL L. PEARSON III.

DONALD K. DORINI, INC.,
Fort Lauderdale, Fla., February 21, 1974.

Mr. GERALD HELLERMAN,
Senate Subcommittee on Antitrust and Monopoly,
Washington, D.C.

DEAR MR. HELLERMAN: On October 29, 1973 Senator Philip A. Hart, Chairman of the Subcommittee on Antitrust and Monopoly directed a letter to a number of the "interconnect companies" doing business in the United States. This letter sought assistance from the interconnect companies to relay back to the committee any problems they or their customers had prior to, during, or subsequent to the installation of customer owned telephone equipment.

I am one of the people in this country who fought the telephone company and who succeeded in having my own equipment installed and who has been unsuccessful to date in eliminating some of the unfair practices the phone company has subjected me to. My installer and service organization for my telephone equipment is Nelron Communications of Ft. Lauderdale, Florida. Mr. Ronald Boender is President of Nelron Communications and has done everything in his power to satisfy me with the installation he has made. I am pleased with the equipment, we are happy we purchased it, it does everything we thought it would do, it has economically assisted us in forecasting our expenses; but in spite of all of these advantages our customer owned system has one big disadvantage of being subjected to discriminatory practices by the national telephone company.

I have periodically directed letters to the Common Carrier Bureau of the Federal Communications Commission. I am attaching a recent copy of such a letter. My big complaint with the telephone company is the necessity for an interface device. In my particular case, cost me well over \$60 per month. This interface device is nothing more than a fuse, or a circuit breaker and is the most idiotically ridiculous required piece of equipment I have ever conceived of. My letter points out in no uncertain terms the independent tele-

phone companies throughout our state and as close as eighty miles to my office install identical equipment to the equipment I purchase without the use of interface devices and connect it directly to the ATT lines. If this practice is not discriminatory, then I would like to know what is discriminatory? I realize this is the day and age when the feelings of the small business man are not too important. Believe me, the presence of the interconnect telephone industry and people like Mr. Boender are essential to the maintenance of free enterprise in this country. I liken Mr. Boender's sale of customer owned systems to that of the purchase of major electrical appliances. Can you conceive of the utility company insisting that all customers utilizing their power buy all appliances from the electric company? Can you imagine what the cost of a refrigerator, a television set, or even an electric iron might be if such were the case. This is exactly what is going on in the telephone business. In order to subject the users to discriminatory practices, etc., such things as interface devices and other gimmicks are used. I have a number of friends who have purchased their own systems who can give you many examples of the practices used by the telephone company to avert the installation of a customer owned system. Most of these people did as I did and went ahead and purchased the equipment anyway. Most of these people are happy with the equipment they purchased. However, the harassment we went through and the continuation of the discriminatory practices leaves a rotten taste in our mouth and we are eagerly seeking relief.

I mentioned I have written regularly to the Common Carrier Bureau of the Federal Communications Commissions. Would you believe in all these days that I have been writing, not one bit of relief has ever been achieved. They have given deadlines and promises as to when subcommittees would meet on this subject and when certain legislation would be passed and lo and behold the years continue to go by, nothing ever gets done. Being a pilot and owning my own airplane has made me well aware of how long it takes for the Federal Communications Commission to take decisive action, but aircraft owners are a minority. Telephone users are not. I do believe the FCC should be urged to take corrective action in as short a time as possible in order to alleviate these unfair practices. I would like your views on this subject and your advisement as to what is being done and what if any action is being taken to achieve some of the results I have desired and some of the items I have listed above.

Very truly yours,

DONALD K. DORINI, INC.,
DONALD K. DORINI,

President.

NOVEMBER 13, 1973.

FEDERAL COMMUNICATIONS COMMISSION,
Common Carrier Bureau,
Washington, D.C.

Attention: Mr. Dave Cosson.

DEAR MR. COSSON: Approximately one year ago I corresponded with you concerning unfair assessment of charges by Southern Bell Telephone and Telegraph Company here in Fort Lauderdale against our account for the installation of interface devices on our privately owned telephone.

To refresh your memory on the previous correspondence you will recall I had exchanged numerous letters with your office concerning our purchase of ITT Corinthian Telephones and having a local interconnect company install these units and connect them to the Bell System lines. This equipment which I purchased is identical in all respects to the equipment currently being used by both the General Telephone Company and United Telephone Company on the West Coast of Florida. In those locations no interface devices are required whatever.

However, I must pay to Southern Bell Telephone and Telegraph Company a charge of \$6 per month per interface device; we have a total of nine such devices which amounts including taxes to a total monthly charge of roughly \$60 for nothing more than a circuit breaker which is not required within sixty miles of our office by another telephone company. You stated this was one of the injustices of the discrimination being shown against interconnect companies and that you thought that legislation and rules and regulation would be published during the summer of 1973 which would eliminate these injustices. You were further optimistic about the fact that

interface devices could be eliminated during the fall or winter of 1973. I am therefore writing to you at this time to inquire of the current status of this legislation and to see if in fact I can make the telephone company remove these unjust devices and discontinue this exorbitant, unfair, discriminatory rate practice they have instituted against my company. I look forward to hearing from you at your earliest convenience concerning this most urgent matter.

Very truly yours,

DONALD K. DORINI, INC.,
DONALD K. DORINI.

SOUND, INC.,
Des Moines, Iowa, March 7, 1974.

Mr. GERALD HELLERMAN,
Antitrust and Monopoly Subcommittee,
Washington, D.C.

DEAR JERRY: Please pardon the delay in getting this letter off to you regarding the comments of Phil Morris, President of The First National Bank of Marion, and Fred Gibson, President of Fred J. Gibson and Co. Inc., Realtors. Here they are.

An interconnect system was installed in approximately February, 1971, by another firm, at the First National Bank. During the summer of 1971, Mr. Morris told me of notice posted in the Marion Central Office of Northwestern Bell suggesting that all employees do business at a bank other than First National and stated why (interconnect). Mr. Morris was informed of the notice by the Marion Fire Inspector, who had seen the posted "suggestion" while on inspection.

Mr. Morris was understandably upset and asked what could be done, to which I had no good answer other than talk to Bell management and try to get hold of the notice. Within the next two weeks, one of our girls went through the Marion City Directory and made a list of all Marion residents working for Northwestern Bell. This list was submitted to Mr. Morris by mail, suggesting that savings and checking accounts in those names be checked. In following up my letter by telephone, Mr. Morris said confirming accounts, primarily if closed, was "too much trouble" and the matter was dropped.

Our system at Fred J. Gibson and Company was installed in October 1970 the first interconnect in Iowa. Mr. Gibson personally was pleased from the start with the system and long term economics he would realize. He discussed the system at national meetings and we fielded inquiries from as far away as California and Massachusetts. Mr. Gibson also mentioned his sales people grumbling about lost business from Bell and he visited with local Bell management about the situation. He, at that time, was willing to fight.

In August, 1973, Mr. Gibson called to say that he was expanding and going into a second office building and was going back to Bell for all services. I asked for permission to give him a quotation and did so at our cost. I told him that, knowing Bell tactics, losing his account could be disastrous to us.

Supposedly without any assurance from Bell, Gibson decided to return to the Bell flock, against the *financial* recommendation of his controller, Terry Trimpe. To further enhance their position, Bell attempted to discredit our financial analysis by showing mileage to the off-premise location on their system as "23 private line circuits @ \$17.50, \$402.50 total." We got an "opinion" from the legal staff of the Iowa Commerce Commission which coincided with ours that charges would be the same.

Our fears of "Bell tactics" were well founded. Before our system was removed, marketing personnel of Northwestern Bell in Des Moines were already telling prospects "Gibson in Cedar Rapids threw them out, it never worked right." I should point out that competition in Cedar Rapids has been more honest and true competition, or if not, we don't hear of the threats, except at Gibson, The Bank, and City of Marion. Des Moines area tactics of Bell are rotten, in almost all instances.

When SOUND, Inc. first entered the field of interconnect in 1970, a meeting was held in Cedar Rapids with Bell marketing people. The major requirement was a letter of authority from our customers authorizing us to obtain information on the customer account and place orders for the customer. This was also honored in Des Moines initially.

Then, in Des Moines, a Northwestern Bell Telephone marketing manager named Todd really went off the deep end. (Todd is the one on the Des Moines Dodge Tape.) He and his people refuse our letter (pp2, Bell letter enclosed) until they see the customer in person and, in the case of Mrs. Spradling, told her she didn't realize what she had signed and asked her to cancel upon Northwestern Bell Telephones receipt of our letter, in Des Moines.

We appreciate your visit and talking with our customers. If our industry is ever to get off the ground, true competition without threats and coercion must exist.

Best personal regards,

JOHN R. MARSHALL, *President.*

SOUND, INC.,

Des Moines, Iowa, March 6, 1974.

Mr. GLENN L. NORRIS,
Hawkins, Hedberg & Ward,
Des Moines, Iowa

DEAR GLENN: You have indicated an interest in the anti-competitive practices of Northwestern Bell towards our customers or prospects. I will forward copies of correspondence to Mr. Gerald Hellerman, Special Financial Advisor to The U.S. Senate Antitrust and Monopoly Subcommittee. Mr. Hellerman should have letter affidavits of most of the cases listed below.

In 1972, I was involved with the proposal of a system to Des Moines Dodge, Mr. William Moyer. The system included a monthly reduction of about \$100.00 and features not offered by Bell. Mr. Moyer told us that he was going to go with us to come in for the order. On arrival, Moyer informed me that he had had a call from Bell with what amounted to blackmail threats about the substantial loss of business from Bell that would occur should he go with our company. The business would be in parts, labor and new vehicle sales.

Grodt-McKay Realtors, Des Moines, was sold and installed in 1973. They were telephoned and visited by Bell personnel and asked to cancel the contract with our firm. They were asked if they were upset at a lack of listings from Bell. They have since been told by a satisfied customer of theirs, to whom they sold his home, that he would like to list the house with them as he was transferred (By Bell), but could not because of Bell pressure.

Internal Medical Clinic, Des Moines, was sold and installed in 1973. Through a fluke, we discovered that Bell intended to begin cutting off their system at 3:30 p.m. on the cut date, instead of the 5 p.m. time requested. No notice was given our mutual customer nor ourselves. In addition, Internal Medical Clinic was asked to cancel our contract, threatened with loss of Bell insurance physicals and received a note on an invoice from a patient about the nasty thing Internal Medical had done to her company by going with us.

Thrun Chevrolet, Inc., Des Moines, was sold in 1973 and installed in February 1974. Wolfgang Thrun, President, was visited by nine or ten different Bell employees in the most persistent harassment yet encountered. He was told what a mistake he had made, was asked to cancel our contract and is now living under a Bell edict for employees not to purchase from his agency. One Bell employee did purchase from Thrun and informed him of the edict.

The Des Moines Local of the Communications Workers of America met in October of 1973 and issued a list of companies who had gone interconnect. We have a copy of the minutes, including the list which we assume to be a Black List. We have been unable to verify verbal comments that preceded or accompanied the "list."

Mr. Don Diehl of the law firm of Diehl, Clarkson and Sizemore in Iowa City was given a quotation in late August or September with *exact* rates and literature on Com Key 718, though no filing existed at that time with the Iowa Commerce Commission. Supposedly other orders were taken from five other law firms in Iowa before Mr. Diehl was presented.

Bell has steadfastly refused to give us a rate for a C-22 coupler and number groupings rate for interconnective Centrex Type Systems, though available and installed within the Bell system. Our requests go back to February, 1971.

Bell marketing personnel have told many of our prospects that their rates were going down as a result of the present hearing, docket U-467. Pro-

spects are urged to wait until the hearing is completed, at which time our proposal would be out of line financially. I believe your firm was one of those told that rates would go down.

Other prospects of SOUND Inc. were sold "special assembly" packages which allowed Bell to low-ball, financially, normal procedures at a substantial loss of revenue over filed rates and tariffs. Still others were coached at how to beat installation charges on the higher levels now applicable under bond.

The situation of pressures exerted upon the City of Marion, its City Council Manager and Employees is well known.

The Gibson Realtor case, Trate variances for stations in remote locations, loss of business etc. has been discussed at length.

As I've often stated, Bell appears to be fearless through threats and insinuations to prospects and customers of SOUND in the field. The plan which they must still be pursuing in forcing us to ask for hearing before the Commission, filing complaints etc. is now designed to force us out of business. They have kept me out of the sales field for over two years.

Very truly yours,

JOHN R. MARSHALL.

INTERNAL MEDICAL CLINIC, P.C.,
Des Moines, Iowa, February 8, 1974.

Mr. GERALD HELLERMAN,
Special Financial Adviser,
Antitrust and Monopoly Subcommittee, U.S. Senate,
Washington, D.C.

DEAR MR. HELLERMAN: It seems many unnecessary problems came up at the time it was the decision of the doctors to change our telephone system from Northwestern Bell to Sound Inc. We didn't receive good repair service from Northwestern Bell and our problems were never solved. They suggested we add additional incoming lines, but our PBX operator couldn't handle our present system.

Mr. Joe Emerson with Sound Inc. talked to me regarding their system and this seems to be the answer to many problems we were encountering. It was the decision of the doctors and myself to use Sound Inc. and Northwestern Bell was notified. A letter was written to Mr. Vogel, Communications Representative of Northwestern Bell. He immediately contacted me asking for an appointment to visit with me. He felt certain we didn't wish to make the change over, we didn't fully understand the system with Sound Inc., in the very near future they could offer us the same system. He asked me to see our contract with Sound Inc. as he knows me personally. He had men higher up to report to. I delayed giving him this information and told Mr. Emerson of the situation. Mr. Emerson suggested I not reveal the figures as this was now between Sound Inc. and Internal Medical Clinic. Mr. Vogel visited me again and I asked him if employees with Northwestern Bell were aware of the fact we were making the change. He said they definitely were not informed. The reason for my question was we received a payment from a patient who wrote us a note, a copy of which is enclosed. He said he would check this out. I did reply to the patient as we made a billing error and she was entitled to the courtesy of a reply. Mr. Vogel also informed we he couldn't guarantee our Clinic would continue to do Northwestern Bell Telephone's physicals. One doctor in our Clinic does physicals for the executive personnel.

There was a delay in making the change-over and Sound Inc. kept Northwestern Bell informed. At the time of the cut-off deadline, September 28, 1973, Northwestern Bell informed us they would cut the lines at 3:00 p.m. Our Clinic is very busy during this peak hour. I requested they wait until 5:30 p.m. at which time we would go on Answering Service. They were very discourteous but finally agreed to my request. Sound Inc. represented by the crew, including Mr. Emerson and Northwestern Bell with their crew and Mr. Vogel met in our basement around 3:30 and the change was completed around 6:00 p.m.

I feel Northwestern Bell was unfair, discourteous and totally out of line with Internal Medical Clinic. We are very happy with our new system. We receive service within 2 hours after calling; Northwestern Bell promised us 24 hour service. Telephones can be answered from different locations, we have a paging system, push buttons and many other advantages which North-

western Bell never could offer us. We are treated very courteous by Sound Inc. and with additional phones, flexibility, etc. we receive this at a lower cost.

We are thankful Northwestern Bell finally has competition. Enclosed are letters which may be of interest.

Respectfully,

IRENE SPRADLING.
Business Manager.

AUGUST 8, 1973.

MR. WILLIAM VOGEL,
*Communications Supervisor, Northwestern Bell,
Des Moines, Iowa.*

DEAR MR. VOGEL: We have appointed Sound, Inc as our agents, in matters of communications. As such, they are authorized to have access to records pertaining to our accounts.

They are further empowered to transact orders, supervise and revise our public utility equipment to meet the needs and requirements of our company.

They will be requesting information regarding billing, and may be requesting busy studies as well as Wats and Long Distance studies and information.

You are hereby requested to make such information available to them, and are released from liability for so doing.

This Authorization will remain in effect until canceled by us.

We appreciate your cooperation.

Very truly yours,

(MRS.) IRENE SPRADLING,
Business Manager.

AUGUST 28, 1973.

MRS. IRENE BARRETT,
Des Moines, Iowa.

DEAR MRS. BARRETT: Thank you for your check of \$15.00, dated August 18, 1973, paying your account in full.

On April 18, 1973, you were scheduled for a complete physical. Our book-keeper coded the doctor's fee incorrect. It should have been coded 02 instead of 03. Please accept our apology for this mistake.

You mentioned in your note that you did not like what we did to the company you work for. We feel this has nothing to do with a doctor and patient relationship. If you are unhappy with our decision, perhaps it would be wise for you to seek another physician outside our Clinic. We would be pleased to transfer your records to any doctor of your choice.

Sincerely yours,

(MRS.) IRENE SPRADLING,
Business Manager.

SOUND INC.

Des Moines, Iowa, September 29, 1973.

MR. W.R. VOGEL,
*Communication Supervisor-Competition,
Northwestern Bell Telephone Co.
Des Moines, Iowa*

DEAR MR. VOGEL: The total lack of concern and disregard for both the professional and emergency needs of the Internal Medical Clinic displayed by Northwestern Bell Telephone Company is shocking and incredible! And, although your company chooses to treat its customers in this disgusting manner, Sound, Incorporated does not!

Since you have advised me today that you had planned to accomplish the conversion tasks on a nonpremium time basis between 3:00 p.m. and 5:00 p.m., it appears that this is a two hour or less task. Therefore, our customer, Internal Medical Clinic, authorizes premium time charge for two hours or less for the following conversion tasks: Central Office Lines, Coupler Final Testing.

We feel that this approach is wholly inappropriate and agree to the above under protest.

Also, this is to confirm that billing for lines and couplers begins at 12:00 midnight on September 29, 1973, and the telephone company's internal PBX

system and associated equipment cease to be billed at 11:59 p.m. on September 28, 1973.

It is our understanding that the telephone company's internal PBX system and associated equipment will be totally inoperative with the completion of the testing of the central office lines and couplers, which are referred to above.

Sincerely,

M. J. EMERSEN.

SOUND INC.

Des Moines, September 6, 1973.

MR. FRED J. GIBSON,
*President, Fred J. Gibson & Co., Realtors,
Cedar Rapids, Iowa*

DEAR FRED: I appreciate your concern as expressed last week and again this morning for the business you have lost from Bell listings or lack of same. You are apparently assured or at least feel quite sure that by re-installing the equipment of Northwestern Bell Telephone Company you will gain that "lost" business.

Your reasoning is understandable and the economics of removing our equipment may be warranted. Your comments last week that "I wish I could say that the service wasn't good, or the system didn't work, or I wasn't saving money but I can't" indicates your concern for us and our business.

We are greatly concerned by this turn of events, Fred, the insinuations and comments which Bell will drop to our prospects will happen, regardless of your warnings or comments to Bell executives or lesser personnel.

We heard over a month ago from within Bell that we were going to lose your account, as I told you last week. The pressures which a giant like Bell can exert upon us, or as misdirected upon you, are tremendous and dip strongly into questionable areas of legality. I am truly sorry that the economic pressure has touched you and your people. You stated last week that you wouldn't have bought from us if you had realized the economic impact of the Bell boycott. I wouldn't blame you a bit and so stated to another prospect who was openly threatened. As we installed most of the major realtors in Cedar Rapids, we hoped to create our own little monopoly and break Bell's boycott.

The cost of moving your equipment to Iowa City would be \$40.00 per phone moved, \$100,000 for central equipment moved and \$36.00 per day for travel time and expense to a maximum of \$360.00 or ten days. Our service contract would drop to \$500,000 annually.

If our relationship as your telephone company is to end, Fred, we want you to know how much we appreciate your boosting of our company and our products. Your kind words of commendation have been responsible, we're sure, for our obtaining other contracts.

Best personal regards

JOHN R. MARSHALL, *President.*

BUTTENHEIM PUBLISHING CORP.
Pittsfield, Mass., December 30, 1972.

HON. C. BULLIS,
*Mayor,
Marion, Iowa*

(Attention: Robert M. L. Johnson; City Manager)

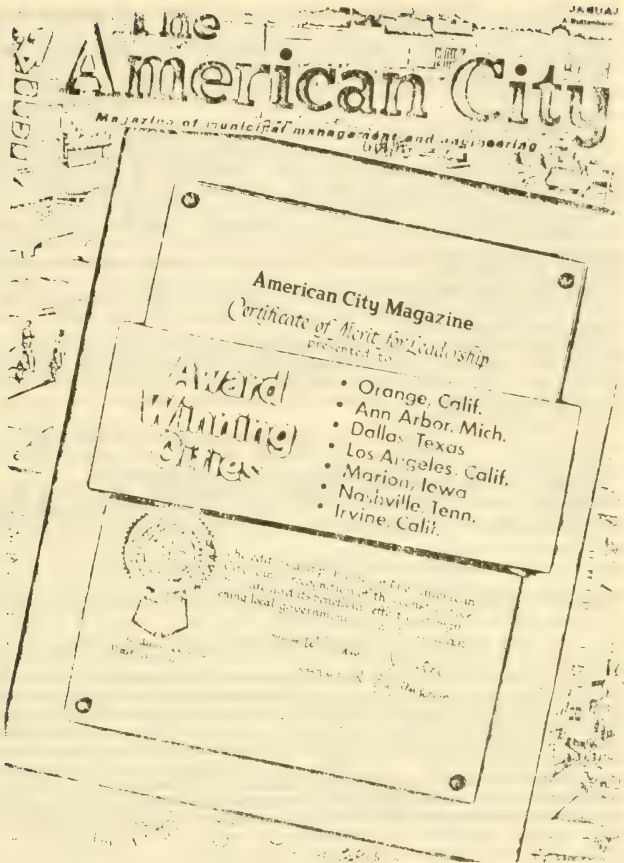
DEAR MAYOR BULLIS: The editors of the American City Magazine take great pleasure in announcing that Marion is one of the select cities winning the American City Magazine Award for Leadership.

The award is based on your efforts to solve the urban government problem. We had the privilege of publishing your account of the program "Own Your Own Phones" in our August issue.

Shortly we will send you a mounted certificate which we urge you present to your city council in an appropriate ceremony. We are also attaching news releases which you may submit to the press, radio and television.

Sincerely yours,

WILLIAM S. FOSTER,
*Editorial Director,
Associate Publisher.*



[For Release Jan. 13, 1973, and thereafter]

(For more information contact: Gary M. Chamberlain, Associate Editor)

COST-CUTTING PHONE SYSTEM CITED: MARION WINS MERIT AWARD FOR URBAN GOVERNMENT

PITTSFIELD, MASS.—The City of Marion, Iowa, received an award today from THE AMERICAN CITY Magazine for outstanding achievement in urban administration. One of only seven urban governments so honored throughout the U.S., the city won its citation for improving its communications network by purchasing its own economical telephone system, rather than leasing this equipment from Bell Telephone.

The American City, a Battenheim publication reaching 36,000 urban management and engineering officials nationwide, has made the annual awards for the

past nine years. This year's recipients bring to 111 the total number of winners since inception of the program.

Only two other Iowa cities have won awards in previous years. Both Des Moines and Ames walked off top honors in 1968.

Merit award judges are AMERICAN CITY editors—each an expert in several urban fields. William S. Foster, AMERICAN CITY editorial director, serves as awards chairman.

In announcing the Marion award, Editorial Director Foster commented:

"A new ruling by the Federal Communications Commission has made it possible for communities large or small to effect substantial savings through innovative communications systems. Marion was one of the first cities to take advantage of this new regulation to the benefit of all of its citizens.

"Marion has shaved the cost of its administrative operations, while increasing the service inside and outside of city hall, by electing to buy and install its own telephone communication system. Now the city has more telephones, with more features, at lower cost."

Other local governments honored in this year's awards program include: Ann Arbor, Mich.; Dallas, Texas; Irvine, Calif.; Los Angeles, Calif.; Nashville, Tenn.; and Orange, Calif.

"The awards program recognizes significant achievements in urban administration and operation," reports Foster. "Our editors constantly dig out these achievements. Men who generate genuine leadership are usually too busy and too dedicated to seek out awards. Yet excellence deserves recognition. Our leadership awards provide it."

City officials do not apply for the awards. Finalists are chosen after personal investigation by AMERICAN CITY editors. Size is not a factor. Prior award winners have come from communities under 10,000 population.

"Winners are honored for developing commendable techniques in urban management and engineering," Foster said. "Any worthwhile advancement through the nation's 56,000 local government units is eligible for consideration."

[From the American City, August 1972]

OWN YOUR OWN PHONES . . . TO CUT COSTS AND GET THE COMMUNICATIONS SYSTEM YOU WANT

(By Robert M. L. Johnson, City Manager; *Marion, Iowa*)

A new ruling by the Federal Communications Commission has made it possible for communities large or small to effect substantial savings through innovative communications systems. Marion, Iowa, provides a good case in point.

Until recently, city governments could not own their own communications system. As a result, Marion leased telephones and related equipment from Bell Telephone. Now, thanks to the FCC, city governments can if they desire, develop their own telephone systems utilizing only the Bell system lines.

Marion wanted a more efficient and less expensive telephone system. We found one. After reviewing the FCC ruling we contacted Sound Inc., a Cedar Rapids, Iowa firm, to investigate the possibility of owning our own equipment.

LEASING IS EXPENSIVE

Leasing any item is a perpetual and extremely expensive proposition. Let me give you a "for instance." A "hold" button in the Northwestern Bell system costs \$1.20 per month *forever*. A combined line and busy lamps cost \$4.50 a month *forever*.

The equipment we purchased from Sound, Inc. is engineered and manufactured by ITT. This equipment, almost identical to that of Northwestern Bell, also has some features not available with the Bell equipment. For example, some limitations to the Bell system included:

the necessity always to attend the console.

people could not place an internal call while waiting on an outside call.

calls could not be transferred without the aid of the operator.

you cannot locate people away from their respective stations.

Sound, Inc. equipment provided most of these features and at less money than we were paying Northwestern Bell for a less efficient operation. We could

have touch tone dialing. Also, calls could be transferred from one station to another without interrupting the operator. You can answer calls from any phone when the operator is not attending the console. We have unlimited conference ability without the aid of the operator. We can page any phone in the system. The system offers unlimited expansion. Best of all, it costs less to operate and maintain.

Let me review the basic financial picture. The gross annual equipment costs for Marion dropped \$3,395.40. This represents a 10-year savings of \$33,954. We purchased the Corinthian System for \$10,605.80. This leaves us a 10-year net equipment reduction of \$23,348.20. Our service contract costs \$350 after the first year. The contract runs for nine years for an expenditure of \$3,150. This gives us a total net savings over the 10-year period of \$20,198.20. Think of the tremendous savings afforded a larger city with many times the number of phones.

Presently we have 15 telephones operating within city hall. To date, we have had nothing but favorable comments from employees and all others concerned with the system. In addition, we had our choice of color at no extra charge. Also at no added cost, we have music throughout the building.

One final note. We have not eliminated the Bell system entirely. Ma Bell still supplies the lines to the building just like other utilities. Now, however, the equipment inside is ours and at a considerable cost savings.

February 13, 1971.

MR. MICHAEL CLEMENS,
*Manager, Northwestern Bell Telephone Co.,
Cedar Rapids, Iowa*

GOOD MORNING, MR. CLEMENS: As a municipal administrator one of my prime objectives is to recommend better use of the tax dollar in the performance of the responsibilities assigned this office.

After careful consideration, it was my best judgment and ultimate recommendation to the City Council that we convert the telephone system from Northwestern Bell instruments and equipment to Sound, Inc. system and equipment. The City Council concurred with this recommendation.

This decision, which we regard as an intelligent one, results in an ultimate saving for the taxpayer of the City of Marion, of more than \$20,000 over a ten year period. This is significant in our judgment.

It seems reprehensible that Northwestern Bell would send two of its representatives, who in effect would cross-examine an executive as to why telephone company representatives were not consulted.

That's bad enough, Mr. Clemens but belittling a competitor's product seems to me to be less than desirable for a corporation as large as Northwestern Bell. That is exactly what Mr. Belt and Mr. Kohler did on their most recent visit to my office.

Further, what is more disturbing to me, is an apparent attempt by some employees of Northwestern Bell, to intimidate members of our City Council by misleading statements and misrepresentation of the facts regarding this systems change.

I'm in no position to suggest who, within the Northwestern Bell system, instigated a series of criticisms leveled at the decision, but I'm confident the impetus came from within the Bell system locally, since the fact that we are going to change the system has never been made public yet.

It's my observation that the Bell system, while expending considerable amounts of money in marketing, fails in the responsibility to the customer by expecting the customer to ask the Bell representative for new ideas regarding better service. Mr. Joe Belt said as much when he asked why I hadn't called for a quotation from the Northwestern Bell system, before the decision was made to go with Sound, Inc.

Frankly, I don't believe it is incumbent upon me, as a customer, to call up and say—"What have you got to offer"—since that's what you pay your marketing people to do.

In conclusion, Mr. Clemens, may we suggest that you advise those employees concerned with the telephone system in the city hall at Marion, to cease and desist their castigation of the decision and accept the fact that they've lost an account.

If you would like to discuss this further, I will be available at your convenience.

Yours for continuing community growth,

ROBERT M. L. JOHNSON,
City Manager.

NOTE.—Nurnberger is President of Northwestern Bell, not involved with Commerce Commission.

MEMO FROM TERRY TRIMPE

FRED: Attached is the analysis of the two phone proposals. It boils down (over a 10 year period) to about a \$3,200.00 savings per year with Sound, Inc. This amounts to about a \$270.00/month saving.

My analysis did not take into account future increases in N. W. B. billings—and I'm sure they would be substantial over a 10 year period.

I did include interest expense on the borrowed funds in my analysis (8½% on 20,000 for 5 years).

Unless we can be relatively assured that either

(1) we will pick up an additional 3,200.00 in company \$s if we go with Bell or

(2) that we will not lose \$3,200 in company \$s that we have now with Bell—I would recommend installing the Sound, Inc. System.

Iowa State Commerce Commission, Docket U—467

REBUTTAL TESTIMONY OF DAVID BENTON

Q1. Please state your name.

A. My name is David Benton.

Q2. Have you previously testified for the applicant in this case?

A. Yes.

Q3. What is the purpose of this testimony?

A. The purpose of my testimony is to comment on certain issues raised in the testimony of Mr. John L. Marshall, witness for SOUND, Inc.

Q4. Mr. Benton, on Pages 2 and 3 of Mr. Marshall's testimony, he indicates some lack of understanding of your cost study data. Would you please describe briefly how these studies were made?

A. Yes. The material cost of the apparatus under study, shown as the first line in my exhibits, was obtained from the latest list of Western Electric prices in effect at the time the study was made. This was then adjusted for sales tax, Class "C" and field stock, supply expense and transportation where applicable.

The engineering cost for all the items studied here was zero as no engineering labor was required.

The labor costs, shown on the second line, reflect the loaded costs for making a typical installation of the apparatus under study. The computation involves multiplying the number of hours required to complete a typical installation by the loaded labor rate per hour. The loadings include pensions and other benefits as well as supervision, motor vehicles, Social Security taxes, tool expense, etc. Test and assignment work, where involved, are also included in the labor costs. In addition, in accordance with the Uniform System of Accounts, the cost of materials such as cable are included in this account (232-Station Connections).

Under annual cost, the maintenance item includes both the maintenance labor and material cost per year plus the annualized shop repair costs. The maintenance labor cost is obtained by multiplying the average number of maintenance hours per year for the equipment under study by the loaded labor rate for repair service. The shop repair costs include refurbishing, transportation and handling costs.

The depreciation cost includes both the depreciation of the investment in the apparatus and the station connection. The material investment is depreciated over the life of the material. The station connection is depreciated over the average location life of the apparatus under study.

The estimated annual cost of administration as related to telephone plant in service is five percent of the investment. The five percent was developed in a special study which is made in my office annually. It includes the cost of General Office salaries, insurance, accidents and damages, franchises, general services and licenses, general Commercial administration, local Commercial

operations, Marketing expense, connecting Company relations, advertising, Revenue Accounting, uncollectibles and other miscellaneous items.

The line labeled Income Tax and Return includes the composite rate of return, at the objective level of 10.5%, applied to the net book investment (gross book investment less depreciation reserve). It also includes the income tax, Federal and State, that is applicable to the income that is subject to taxation.

The line Other Taxes include Property and Miscellaneous taxes and is estimated to be 2.5 percent of investment. This is based on a special study made in my office annually and is a weighted average of state and local taxes other than income taxes incurred per dollar of plant investment.

The monthly revenue requirement is, of course, the annual requirement divided by twelve.

Q5. Mr. Benton, has the cost for cable been included in your studies of the various multiline sets.

A. Yes. The cost of all station installation materials has been included in my studies.

Q6. In Mr. Marshall's testimony he quotes various prices for 10-button and 20-button rotary telephone sets. Can you identify the sources of these prices.

A. Yes. The \$56.90 was developed from the Western Electric Company price list dated May 1, 1972, for the "830 AIM" telephone set. This set is assembled from piece parts purchased from the Western Electric Company. The \$47.90 mentioned is for a new completely assembled set coded "830 CT." This price was covered in an Engineering Letter (E.L. 2529) from the American Telephone and Telegraph Company to the Operating Companies in May, 1973. The \$93.90 for a 20-button set was developed from the Western Electric Company price list dated May 1, 1972, for the "831 AIM" telephone set. The \$76.60 mentioned by Mr. Marshall is also from E.L. 2529 and applies to a new completely assembled set coded "831 CT."

Q8. Mr. Marshall also mentioned "material prices" for a 10-button rotary set of \$54.60 in 1971, \$60.34 in 1972, and \$58.16 for your study submitted in this proceeding. What is the source of these figures?

A. The \$54.60 was developed from the Western Electric Company price list dated April 1971, and is the bare material price for an "830 AIM" set. The \$60.34 is the \$54.60 material price loaded for Class "C" and field stocks. The \$58.16 shown in the summary of my study includes loading for Class "C" and field stocks. It is based upon a bare material price of \$51.15 which was developed from the latest Western Electric Company price list in effect at the time the study was made.

Iowa State Commerce Commission, Docket U-467

REBUTTAL TESTIMONY OF N. J. SEARS

Q1. Please state your name.

A. N. J. Sears.

Q2. Have you previously testified for the applicant in this case?

A. Yes.

Q3. What is the purpose of this testimony?

A. The purpose of my testimony is to comment on certain issues raised in the testimony of Mr. John L. Marshall, witness for SOUND, Inc.

Q4. On Page 3 of his testimony, Mr. Marshall states: "We have requested quotations from Bell on two installations in the past year." Does Northwestern Bell sell inside cable and wiring to others?

A. Yes. If inside cable and wiring no longer can be used by our Company, it will be offered for sale, in place, to the customer on whose premises it is located. The price for sale of the cable or wiring is determined to be the in place structural value of the facility. Normally, this would be computed as reproduction cost new of both the material and installation less an allowance for depreciation of the plant actually in place. Each pending sale is handled on a custom basis, so each is different.

Q5. On Page 4 of his testimony Mr. Marshall says: "The Bell cable was basically destroyed during removal and was 'dumped' after removal." Does Northwestern Bell "dump" cable and wire that has been removed from service?

A. In this case, as in others involving the removal of copper wire, the wire is not "dumped" but returned to the factory for recovery and reuse of the copper.

Q6. On Page 6 of Mr. Marshall's testimony he states: "It was admitted by Mr. Sears that certain 200 Series PABX installations were noncompensatory but, 'if you make us raise the rates of the 200, you can bet we'll lower the Series 300 where you still may be able to compete.'" Are those your words?

A. PBX services are not involved in the filings that led to this hearing, of course. Further, no transcript of the meeting Mr. Marshall describes was made so I cannot quote word for word what was said more than a year ago. The quotation he gives is certainly not one I remember.

In the first place, the discussion did not concern itself with Series 200 rates but with Series 100 and 300 rates. Mr. Osborn of the Commission staff, Mr. Marshall, and I were discussing the Commission order in Docket U—352. Mr. Osborn noted that there were points on the cost versus revenue curves we submitted in graph form where the proposed rates would not provide enough revenue for the requested 9½% return for the 100 Series PBX service. He felt that the Commission order could be interpreted to say that at all points of the graph revenues should provide at least the allowed rate of return. I told both Mr. Osborn and Mr. Marshall that I did not agree with that interpretation. I felt that such an interpretation would place a virtually impossible constraint on rate making in the PBX area on any but "hardware" pricing—that is to price each serving vehicle differently to recognize its specific costs. However, I did agree I would propose increases in rates for the 100 Series service for Commission approval if both Mr. Marshall and Mr. Osborn felt this was a proper interpretation. As I recall, Mr. Osborn then pointed out that rates for some other service or services would need to be reduced since the increase in total revenues was specified in the Commission order. I stated that since an increase was being requested in 100 Series PBX service, where there were points that were not yielding the requested 9½% rate of return, a rate reduction to offset this increased revenue should be proposed for 300 Series PBX service where the returns were well in excess of the requested rate of return. I stated I felt it was reasonable to propose this change since both rates would then be changed to provide returns nearer those being requested. As Mr. Marshall stated, he later agreed that the rates as originally filed would be preferable to him. In proposing new rates in response to the Commission order in Docket U—352, I proposed exactly the same PBX service rates that had been proposed at the start of the case, and there was no objection to this proposal by Mr. Marshall.

Q7. On Page 6 of Mr. Marshall's testimony he states: "It appears that Com Key is being offered at a rate less than other operating companies of AT&T which Northwestern Bell Telephone records or records to which they have access would verify." Have you made any such comparisons?

A. As I have stated in at least one previous case, I do not believe that state-to-state comparisons of rates are valid unless it can be established that the operating characteristics of the states are closely similar. There are wide variations in weather, geography, and even wage rates and state taxes that make such comparisons difficult. However, since Mr. Marshall has raised this question, I have obtained rates for the Com Key 718 in several nearby states. They are listed on Page 1 of Exhibit --.

Q8. Would you explain this exhibit?

A. Monthly rates and installation charges for the major components of Com Key 718 are listed under the headings of Common Equipment, Line Equipment, Rotary Station, Message Waiting Console, and D.S.S. Console. The several nearby states are listed in Column 1. As can be seen on this exhibit, the rates proposed for this service in Iowa are comparable to those already in effect in these various states. In addition, the business extension rate applies in Iowa, Wisconsin, South Dakota, and Minnesota for each telephone in excess of lines. This is not true in the other states. This rate application results in a still higher revenue from the Iowa systems as compared to several of the other states.

Q9. On Page 7, Mr. Marshall states: "On August 18, 1971, Bell filed for a General Rate Increase, however, most competitive PABX services went down." Is this correct?

A. PBX services were not a part of the filings that led to this hearing. However, PBX service rates filed in July of 1971 resulted in revenue increases of \$214,000 annually, as shown in my testimony in Docket U-352. Those rates were not reduced as a result of the order in Docket U-352, even though our total asking was reduced.

Q10. On Page 8 of his testimony, Mr. Marshall states: "Without known exception, all other rates for basic residence or business services, phones, long distance, et cetera, have gone up." What comments have you on this statement?

A. As the information submitted with my direct testimony shows, revenues derived from the services in this case are in excess of costs. As Mr. Benton has testified, these costs were computed with a 10½% rate of return. Other rates have indeed been increased because the total revenues in the state of Iowa have not increased as rapidly as costs. Mr. Marshall seems to be saying that the grocer whose wholesale meat prices have increased 25% must increase the price of soda pop and graham crackers if he increases the price of meat to cover his increased costs.

Q11. Mr. Marshall states on Page 5 of his testimony: "I also believe it is the intent of the Northwestern Bell Telephone Company to eliminate my company as a competitor." Have you any comments on that statement?

A. Yes. As my direct testimony shows, the services which are the subject of this hearing are being rated to result in revenues in excess of costs, which include a component for rate of return. Our proposed pricing, then, in my opinion, does not result in anti-competitive situation.

COM KEY 718 RATES IN VARIOUS STATES

State	Com. Eqpt.		Line Eqpt.		Station		Msg Wait. Cons.		D.S.S. Cons.	
	Installation	Monthly	Installation	Monthly	Installation	Monthly	Installation	Monthly	Installation	Monthly
1. Iowa-----	\$150	\$30	\$15	\$1.50	\$50.00	\$6.50	\$75.00	\$10.00	\$75.00	\$10.00
2. Minnesota-----	150	30	15	1.50	50.00	6.50	75.00	10.00	75.00	10.00
3. Illinois-----	150	30	15	1.50	50.00	7.50	50.00	8.00	50.00	8.00
4. Missouri-----	150	30	-----	1.50	40.00	6.00	40.00	7.50	40.00	6.50
5. Arkansas-----	150	30	-----	1.50	40.00	6.00	40.00	7.50	40.00	6.50
6. Kansas-----	150	30	-----	1.50	40.00	6.00	40.00	7.50	40.00	6.50
7. Texas-----	150	30	-----	1.50	40.00	6.00	40.00	7.50	40.00	6.50
8. Arizona-----	150	30	5	1.50	41.65	5.50	52.05	7.00	52.05	7.00
9. Wisconsin ¹ -----	150	30	-----	1.50	25.00	6.00	40.00	8.00	40.00	7.00
10. S. Dakota ¹ -----	150	30	15	1.50	50.00	6.50	75.00	10.00	75.00	10.00

¹ Filed, not effective.

Iowa State Commerce Commission, Docket U-467

TESTIMONY OF JOHN R. MARSHALL

Q. State your name please.

A. John R. Marshall.

Q. What is your vocation?

A. I am president of SOUND, Incorporated of Cedar Rapids, Iowa, the major telephone interconnect company in Iowa.

Q. What is Telephone Interconnect?

A. Interconnect is the name given the industry which was allowed to compete with telephone utilities for on premise equipment and services by the Federal Communication Commission Carterphone Decision.

Q. What is your communications experience?

A. I was employed by Illinois Bell Telephone Company from 1957 until April 1961. The first year at Bell I was a Commercial Representative, the latter three years I was in Marketing. From May, 1961 to May, 1963 I was a salesman of intercommunication equipment for Modern Communications Inc. in Chicago. In May, 1963, I formed and began operation of SOUND, Inc. in Cedar Rapids.

Q. What are your functions at SOUND, Inc.?

A. Initially my functions were mainly sales and controlling the financial details and purchasing of the company. Since June of 1970, my main functions have been attempting to maintain adequate working capital despite heavy

financial losses incurred by our inability to market our services with seemingly endless fluctuating prices introduced by Northwestern Bell Telephone Company. In addition, large amounts of my time have been spent preparing for hearings such as this and attempting to refute continual erroneous statements made by Bell to our prospects and customers. As our business has failed to prosper and employees have been released, more and more general office functions have come back to me.

Q. What effect would implementation of the proposed rates in this Docket, U-467, have on your company.

A. Though we could, hopefully, continue in business, our ability to market telephone equipment would be nearly nonexistent. Our charges presently are in the bottom 20% of all interconnect companies.

Q. Have you reviewed the testimony of Mr. Sears and Mr. Benton?

A. Yes I have, yet I find it impossible to refute the figures in their exhibits without thorough examination of the sources of these figures, by qualified cost accountants.

Q. Do the figures seem correct to you?

A. Many questions come to mind when trying to ascertain the validity of the exhibits. Some of these questions go further than Northwestern Bell, and question the pricing of Western Electric. For example, Northwestern Bell Telephone submitted costs in 1972 of \$56.90 for a 10-Button Rotary set (SOUND Inc. interrogatory 12) and New York Tel. Company submitted costs of \$37.90 in 1973 (New York Public Service Commission-Case 26472). Northwestern Bell Telephone Company submitted a cost of \$93.90 for the 20-Button Rotary set, New York Tel. Company price was \$76.60. In addition, material price on a 10-Button Rotary set, Northwestern Bell figures of April 4, 1971 was \$54.60, 1972 (Commission Staff X1-71) was \$60.34 and in Mr. Bentons exhibit, page 1. is \$58.16. From the President's 1973 Economic Report, increase in prices from 1967 through 1972 was 28.29%. Western Electric products were somehow shielded from this inflation. The other Multi-Line Key units, by Northwestern Bell figures, followed the same curve.

Q. Do other areas of cost disturb you?

A. It all comes down to verification of Northwestern Bell Telephone Company's cost accounting, which I am not qualified to attempt. The administration figure must, assumedly, include the cost of marketing personnel with the responsibility of meeting competition head-on. It also appears that Bell has not included any cost for cable on the units proposed for reduction throughout all of their exhibits. We have requested quotations from Bell on two installations in the past year. Both were extremely revealing. My exhibit #1 covers the quotation on James W. Bell Company, Inc. It should be noted that the Bell cable is 25 pair, while we buried 50 pair; that the Bell cable was subsequently abandoned; and that the Bell cable was installed in 1951. While Bell's price was \$402.99 for smaller, very old cable, our cost for installing new cable and terminals was: Materials at \$181.12, Sub-Contract Labor at \$125.00 for trenching and our Labor and Supervising of Trenching at \$80.00. This totals \$386.12. My exhibit #2 includes numerous attempts to get in writing a verbal quote given on Bell's cable in the Chet Elson Insurance Agency. The final page of Exhibit 2 is Bell's written quote of \$2,075.32. Our system included (17) 6 & 10 Button phones and the Bell cable was 50 and 75 pair, as opposed to 25 pair required by our system. The Bell cable was removed, where possible, with many overtime Bell hours. The Bell cable was basically destroyed during removal and was "dumped" after removal. Our cost of replacement consisted of cable plugs, terminal blocks \$460.51 and labor \$350.00, a total of \$810.51. The point is this: Northwestern Bell Telephone Company claims costs far below ours on all equipment prices revealed over the past three years, yet unrealistic "offers" of sale are made to us. Each time we refuse to purchase. Bell costs go up even more.

Q. Your preceding answer suggests that 6 & 10 Button phones each use 25 pair cable. Are other costs constant?

A. Yes they are. Costs for installation of a 6-Button set and a 10-Button are virtually identical. This would indicate that a higher monthly and installation or move cost should be attached to the 6-Button set.

Q. Are higher installation and move costs warranted by the telephone company?

A. I believe they are. Our charges for move of Key phones exceeds those of Bell by 50 to 125% and we lose money on moves. However, the number of moves claimed by Bell are very high, the station life figures are low.

Q. Why do you feel that Northwestern Bell Telephone Company has filed for lower rates on Multi-Line Key again?

A. Only Bell knows that answer, but I have many ideas. Bell must get lower Multi-Line monthly rates to justify the rates that were filed for the Com-Key tariff. Yet our Iowa rates on Multi-Line services are among the lowest nationally, I understand. I also believe it is the intent of Northwestern Bell Telephone Company to eliminate my company as a competitor. This was brought to bear upon completion of the hearing designated as U-352 in which SOUND, Inc. intervened. The Commission order in that case stated "Intervenor, SOUND, Inc., is engaged in the business of selling and leasing Multi-Line Key Systems, including PABX and Centrex telephone equipment. It alleges that the Company design of the proposed rates and charges for Multi-Line key systems, including PABX and Centrex, are non-compensatory, discriminatory, and anticompetitive in nature.

Based upon the reasoning expressed in our order in *Reasonableness of Certain Rates and Charges for Business Phone Service provided by Northwestern Bell Telephone Company*, Docket No. U-366, we find that the effects of Northwestern Bell Telephone Company pricing on SOUND, Inc. involves a potential anticompetitive situation, and therefore the rates and charges for Multi-Line key systems contained in the tariff which Company must file to comply with the provisions of this order shall be designed to be fully compensatory, based on fully distributed costs."

Shortly after the issuance of that order, witness Mr. Sears and myself had a meeting in the offices of the Commerce Commission. It was admitted by Mr. Sears that certain 200 Series PABX installations were non-compensatory but "if you make us raise the rates of the 200, you can bet we'll lower the Series 300 where you still may be able to compete". I agreed to the rates as filed. By attempting to lower the monthly rates in this hearing, Northwestern Bell Telephone would effectively lock us out on all present installations, with a possibility of competing only on moving businesses. We must still contend with a coupler rate of \$6.50 for each line.

Q. What about Com-Key 718?

A. As I have stated before, I am not a rate analyst or accountant, nor do I have the records which Northwestern Bell Telephone utilizes for their itemized revenue requirements. It appears that Com Key is being offered at a rate less than other operating companies of AT&T, which Northwestern Bell Telephone records or records to which they have access would verify. Since we could not afford a rate analyst for this hearing, we must rely too heavily on Bell information and documentation to support our position.

Q. When did Com Key 718 first become available in Iowa?

A. Technically, it is not yet approved by the Commerce Commission for sale in Iowa until this hearing is concluded. It was first quoted, with exact rates as later filed, in August of 1973. The contact was with an Iowa City law firm who was told that "Northwestern Bell Telephone Company had approval to sell six law firms Com Key 718 in Iowa and we have five orders now". We filed an objection to this practice October 1, 1973 and Northwestern Bell Telephone filed their tariff asking October 3, 1973. Mr. W. L. Tiffany of Northwestern Bell Telephone Company answered our objection on October 10, 1973. His answer is my exhibit #3.

Q. Does that end your prepared testimony?

A. I would like to conclude only by stating that Bell has utilized SOUND, Inc. and the Iowa State Commerce Commission as testing grounds for price maneuvering in the following sequence. Prior to June 1, 1971 rates were long established for Multi-Line Key equipment. June 1, 1971 to February 1, 1972, key monthly rates were greatly reduced. On August 18, 1971, Bell filed for a general rate increase, however, most competitive PABX services went down. February 1, 1972 to present, Multi-Line key rates re-established at level of pre

June, 1971. Rate askings of Northwestern Bell Telephone in U—352 were drastically reduced by the Iowa State Commerce Commission, yet lower PABX charges were still left intact. In August, 1973, Multi-Line phone rates were filed for an even larger reduction than in 1971. This was again followed by a rate increase, restoring PABX to earlier levels which we had fought for in U—352. When we discuss our services with a prospect we are always confronted with proving our point to them. Proving that we can sell or lease a system that will pay for itself in “just” seven or eight years in most cases. Selling of accounts takes two-three months. Bell always has a rate change to benefit our prospect before we can close. Exact rates for Com Key 718 were quoted to one of our prospects thirty days before any filing or knowledge of Com Key was received by the Commerce Commission. If any change is granted at the conclusion of this hearing on Multi-Line phones, it will be the fourth rate in effect since May, 1971. Since December 1, 1971 three rates have applied on PABX services, our other competitive program. Without known exception, all other rates for basic residence or business services, phones, long distance et cetera have gone up. The mandate of the FCC's Carterphone Decision to allow competition is being defied by Northwestern Bell Telephone Company. The general rate payer pays higher charges to allow Bell to lower competitive rates. The comment of the manager of the Glenwood, Minnesota exchange for Northwestern Bell Telephone in July, 1964, “You can't afford to fight the telephone company, we'll break you”, becomes increasingly true.

Exhibit 1

NORTHWESTERN BELL,
Cedar Rapids, Iowa, February 27, 1973

Re: James W. Bell Company Inc.

MR. JOHN R. MARSHALL,
Sound Inc.,
Cedar Rapids, Iowa

DEAR MR. MARSHALL: Per your request as an authorized representative for James W. Bell Company Inc., we have completed our appraisal on the section of cable a purchase price was requested for.

The purchase price will be \$402.99.

As per previous conversations: upon written authorization a bill of sale will be drawn up and consummated with the James W. Bell Company Inc. Payment will be accepted only from James W. Bell Company Inc.

If you have any questions regarding this matter, please feel free to contact me.

Cordially,

J. R. KOHLER,
Communications Supervisor.

Attachment:

FORM 3791—REQUEST FOR INSIDE WIRE APPRAISAL

To: Plant Engineer J. I. Sibert—1035 3rd Avenue Southwest—Cedar Rapids
Please prepare an Appraisal for Sale of Inside Wire and/or Cable at: James W. Bell Company Inc.—1720 I Avenue Northeast—Cedar Rapids, Iowa 52400

As requested by: John R. Marshall, President, Sound Inc.

Customer requests appraisal by: A.S.A.P.

Bill appraisal fee to: James W. Bell Company Inc.—319-362-1151, P.O. Box 727, Cedar Rapids, Iowa 52406.

Appraisal given to customer on: 2-28-73.

By Telephone Company Representative: J. R. Kohler, Jr.—Communications Supv.

APPRAISAL FEE

The following amount will be billed as a result of delivery of the attached Inside Wire and/or Cable Appraisal:

Basic Charge; \$45.00.

Terminals @\$.25 each.

Total Appraisal Fee; \$45.00 Acct. Class 526.

Authorized: J. I. Sibert, Project Engineer.

STRUCTURE VALUE OF PLANT A7 JAMES BELL CO. TO BE SOLD

Item of plant and unit	Quantity	Year placed and field code	Current material price per unit	General trade equivalent factor (material)	General trade equivalent price per unit (DXE)	Reproduction cost new (from BGUC)	Reproduction cost adjusted for general trade equivalent G+(F-D)	Per cost excavation factor	Structural value (B×H×J)
Table									
B.T. 26-26 (feet).....	248	51	135	1.0	135	11.15	1.15	95	\$270.94
25 PR terminal (each).....	1	51	25.35	1.0	25.35	139.00	139.00	95	132.05
Total.....									402.99

1 Includes trench.

Exhibit 2

OCTOBER 26, 1973.

MR. W. R. VOGEL,
Communications Supervisor—Competition,
Northwestern Bell Telephone Co.
Des Moines, Iowa

DEAR MR. VOGEL: In reviewing my files, I find that I have never received the cable quotation for Chet Elson Insurance. I'm sure this was just an oversight.

Will you please send this to me by return mail.

Sincerely,

M. J. EMERSON,
 SOUND, INC.

NORTHWESTERN BELL,
Des Moines, Iowa, October 30.

SOUND, INC.,
Des Moines, Iowa

DEAR MR. EMERSON: I'm sorry I don't recall the cable quotation. Since the decision not to buy is past, and the cable removed, I haven't looked up the answer.

Sincerely,

W. R. VOGEL

DECEMBER 4, 1973.

MR. WILLIAM R. VOGEL,
Communications Supervisor—Competition,
Northwestern Bell Telephone Co.
Des Moines, Iowa

DEAR BILL: Several months ago, our Joe Emerson requested a quotation from your company for purchase of the existing Bell cable at the Chet Elson Insurance Agency. You responded with a quotation by phone for that installation but have since refused numerous requests by phone, in person and in writing for the written quotation.

We ask once again for that cable quotation for our records. The information is in your files.

Respectfully yours,

SOUND, INC.
 JOHN R. MARSHALL,
President.

NORTHWESTERN BELL,
Des Moines, Iowa, December 10, 1973.

SOUND, INC.
Cedar Rapids, Iowa

DEAR JOHN: Thank for your suggestion that the information you requested is in my files. However, I checked there and did not find it.

Several months ago I quoted the price to Mr. Elson in person and to Joe by telephone. Our offer was refused and the cable removed.

John, each customer's service is an individual situation, so the quotation is good only for that customer.

If you submit a logical reason as to why you need seemingly meaningless information, I may be encouraged to find the answer.

Sincerely,

W. R. VOGEL,
Communications Supervisor.

DECEMBER 14, 1973.

MR. W. R. VOGEL,
Communications Supervisor—Competition,
Northwestern Bell Telephone Co.
Des Moines, Iowa

DEAR BILL: I have found it interesting to read and re-read your letter of December 10, 1973 regarding the cable quote for Chet Elson Insurance Agency. That price is in Bell files, Bill, maybe not in "your" files but your employers files.

Quotations are "individual" in nature and was, in the case of Elson, refused. Your company has since billed the Elson Agency for the charges demanded by Bell for the possibility of selling otherwise lost product.

It is "logical" that we want your price as you have given it to both Mr. Elson and Joe Emerson for our file on legal matters and for your cost related pricing as so designated before the Iowa Commerce Commission.

We know the prices quoted, Bill. We have them on file from your verbal quote and Mr. Elson has them. We want them, in writing, to avert a long delay in commission hearing procedures scheduled for February 1974. The Commission will, I feel certain, demand those figures as essential to verification of your cost accounting.

I hope that your company does not intend, once again, to play games with us or the Commerce Commission.

Very truly yours,

SOUND, INC.
JOHN R. MARSHALL,
President.

NORTHWESTERN BELL,
Des Moines, Iowa, January 2, 1974.

MR. JOHN MARSHALL,
SOUND, INC.,
Cedar Rapids, Iowa

DEAR JOHN: Our price quote, relating to Chet Elson Ins., was \$2075.32.

Sincerely,

W. R. VOGEL,
Communications Supervisor.

Vogel to Emerson "that's what we wanted him to say" regarding June letter on cost accounting.

NORTHWESTERN BELL,
Des Moines, Iowa, October 10, 1973.

MR. RAYMOND K. VAWTER, JR.,
*Administrator, Iowa State Commerce Commission—Utilities Division,
Des Moines, Iowa*

DEAR MR. VAWTER: Mr. Marshall's complaint is concerned with our discussing a new service offering called Com Key 718 with our customers. He is also asking the Commission to withhold its approval of the Com Key 718 if it is filed.

As Mr. Marshall notes in paragraph 3 of his complaint, this is a new equipment package. A general description of the system is contained in our Tariff Transmittal No. 396, Commission File TF3-202, dated October 3, 1973.

Mr. Marshall does not name a specific customer to support his allegation concerning "marketing" of this new system, so specific facts cannot be checked. However, general information on the system has been available for several months. In addition, the new system has been filed and is effective in other states. It is hardly remarkable, then, that Iowa customers, as well as our Iowa Company employees, have heard of this system and discussed it. It is not at all unusual that new systems are discussed with customers before they are readily available and before tariffs are filed to cover them.

Mr. Marshall, as we understand his complaint, is asking that new systems not be discussed with Iowa customers before tariffs are filed and effective in Iowa. Of course, this is an impossible request. Northwestern Bell cannot—and would not wish—to stop information regarding new products at the state line of Iowa. An example of such discussion is the new product, Picturephone. This service has been known and widely discussed throughout the United States although it is not now available in Iowa and most certainly tariffs for the service have not been filed. However, we do not intend to attempt to stop discussion of the subject.

Mr. Marshall complains in paragraph 3 that a "tentative" order for this new service has been placed with us. Certainly, at this time, an order for this equipment is "tentative." In the first place, specific rates for the service were made available only with our tariff filing of October 3. In the second place, this newly developed equipment is in short supply and exact delivery dates cannot be assured.

Next, Mr. Marshall asks that this new service, when filed with the Commission, be suspended because it is "anti-competitive in nature." He apparently felt he could determine the "anti-competitive" nature of the filing before it was available to him. He gives no reason and no facts to support his statement that the new service is "anti-competitive." He has simply labeled it as such.

What are the facts? The system is a new service, as Mr. Marshall himself states in his complaint. Rates for the new service, then, can hardly be compared to existing rates for other services to determine whether or not they are "anti-competitive." The fact that the new service is priced above or below present Multiline Key Telephone Services or PBX services is not the issue. This new service should be expected to stand on its own feet as do other services.

The tariff transmittal covering the filing of this new system with the Commission lists costs and rates side by side. In every case, the rates are above costs. Certainly, then, the system is not "anti-competitive" since it is priced to be fully compensatory.

Mr. Marshall further requests that the Commission include this new service in hearings for "the general increase to be filed in the near future. The introduction of a new service has not, in the past nor should in the future, be limited to a general rate case. It is not an existing service being repriced. Rather, it is a new introduction similar to dozens of other new introductions made on a continuing basis to provide our customers new services as they are developed and become available.

In summation, many Iowa customers, of course, know about the Com Key 718. It has been general knowledge for some period of time, if for no other reason than that it is being offered in other states. The tariff transmittal covering the introduction of this new service indicates it is being introduced above cost. Equipment for a few customers will be available in November.

Mr. Marshall's request that this new product be withheld from Iowa customers by the simple device of labeling it "anti-competitive" is without merit. In view of these facts, we request the Commission dismiss the complaint and allow tariffs covering this new service to become effective as scheduled.

Very truly yours,

W. L. TIFFANNY,
Assistant Vice President.

UNIVERSAL COMMUNICATION SYSTEMS INC.,
Roanoke, Va., March 7, 1974.

Mr. GERALD HELLERMAN,
Special Financial Adviser,
Senate Subcommittee on Antitrust and Monopoly,
Washington, D. C.

Dear Mr. HELLERMAN: I am corresponding in response to a request for information submitted to me by Phillip A. Hart. In a letter dated October 29, 1973, Mr. Hart solicited documents and supporting information regarding our company's dealings with the Telephone Company. In order to thwart competition, operating telephone companies utilize every device within their power. Some of the tactics used are either impossible or very difficult to prove.

Please refer to the enclosed memorandum from Mr. Tom Craig, Vice President of Sales for UCS, which will reflect some examples relatives to contract consummation experienced by UCS.

Our company has experienced many other forms of harassment as well. Cable prices are found to be inconsistent from area to area. Along with the inconsistency of cable pricing is the delay in getting a price. Examples of these delays and problems are attached, as Addendum A, to this letter.

Maintenance cost by UCS are considerably higher than they should be. This is due to the unwillingness of the Telephone Company to supply the same service to customers who purchased their equipment from UCS as they do to their own customers. Naturally, since our company is a profit making organization we pass these additional cost on to our customers. You may deduct that the interconnect customer is again penalized not only in poor service but monetarily as well. Attached, as Addendum B, to this letter are five randomly selected cases in which it became necessary for UCS management to get intimately involved with the repair of common line troubles and voice connecting arrangement

problems. In the lefthand corner of each document you will find a number. Please reference this number should you have any questions.

I would like to offer you my personal time in resolving any problems relative to the new interconnect industry. Please feel free to write or call, if I can be of further assistance in resolving any of these problems.

Sincerely,

JOHN S. WHITCOMB,
Engineering Manager.

Enclosures :

Memorandum To: John Whitcomb.
From: Tom Craig.
Date: December 12, 1973.
Subject: Telephone Company Harassment.

In reference to the information that you asked for concerning some accounts in which the telephone companies have made statements or have taken actions that constitutes forms of cohersing customers, the following is submitted to you:

1. Colonial American National Bank, Roanoke, Virginia—We have submitted a proposal to this customer and showed them substantial savings of \$400.00 to \$500.00 per month. The Telephone company came back to this customer and indicated that if the bank bought its own telephone sysytem, the telephone company would remove their deposits from their bank, which would mean considerable loss of money to the bank. The bank indicated that they could not run the risk of losing this business; therefore, they did not purchase our system.

2. Hilton Inn, Burlington, North Carolina—These people were considering buying a system from us, since they had purchased a system from us for each of their locations in Raleigh, Winston-Salem, and Greensboro. However, Western Electric has a large plant in Burlington, and the telephone company indicated to the Hilton people that if the Hilton people did not install a Western Electric system, they would not get any business from them.

3. Pitzer Transfer and Storage, Roanoke, Va.—These people expressed an interest in buying a system from us. However, when the telephone company became aware of it, they had Western Electric to threaten to remove the equipment they keep stored at Pitzer. After this happened, Pitzer Transfer became scared and said they must remain with the telephone company.

4. Continental Telephone Company, at the Howard Johnsons outside of Fredericksburg, had written their tariff and threatened customers that in the event they went with an interconnected system, the telephone company would not pay any commission on long distance calls. This is a large source of revenue for the motels and, therefore, the customer did not buy our system.

5. Colony Inn, Chambersburg, Pennsylvania—United Telephone in Chambersburg, Pennsylvania, after hearing that we had a contract for the Colony Inn, went to the customer and advised him that they would not provide toll terminals for this customer. The customer had no choice but to cancel our contract and go with the telephone company.

There are many instances such as the one with United Telephone in Gettysburg, General Telephone, Myrtle Beach, and many others where the telephone companies have threatened to charge for directories if the company goes with an interconnected system.

John, I feel this will give you a cross section. If other examples are needed, please let me know.

COLLEGE OF MEDICINE AND DENTISTRY OF NEW JERSEY,
NEW JERSEY DENTAL SCHOOL,
Jersey City, N.J., March 11, 1974.

MR. GERALD HELLERMAN,
U.S. Senate, Anti-trust Committee,
Washington, D.C.

DEAR SIR: I am writing to protest what I consider to be arbitrary discrimination towards me by the Bell Telephone and the New Jersey Bell Systems. On Thursday, February 28, 1974, and Friday, March 1, 1974, I was informed by a

Mr. Binanky of the New Jersey Bell Telephone System that my telephone service was in jeopardy because I had purchased and had installed a telephone answering device. I am presently an assistant professor of oral and maxillofacial surgery at the College of Medicine and Dentistry of New Jersey. As an oral and maxillofacial surgeon, I am on emergency call, 24 hours a day, to several hospitals, to surgically treat facial trauma. Obviously, this answering machine is a vital part of the communication system I need as a surgeon. It is further necessitated by the fact that I am a bachelor and have no one to answer my phone for me when I am not home. I was informed by Mr. Binanky that this device was "harmful to their system" and that I was required to have an interface device installed for "my protection" and the protection of their central office equipment. I was further informed that if I did not order such an interface device within 24 hours, and I continued to utilize the answering machine, that my telephone service would be discontinued. I asked Mr. Binanky to send me: 1) Scientific, factual verification that the brand and model number answering machine which I own was, in fact, potentially damaging to their system, and 2) A copy of the existing telephone company policy and tariffs which dictate that an interface device must be installed and maintained by the telephone company, and if it was not, that my service could summarily be terminated. At that time I considered Mr. Binanky's statements regarding the potential hazard of my answering machine to be unsubstantiated for several reasons: 1) Mr. Binanky was completely unaware of the particular brand and model number answering machine which I own, 2) He was also unaware how the machine was technically connected to the Bell System equipment. A relatively lengthy period of discussion followed in which I informed Mr. Binanky that I felt his assertions of possible damage for my machine were unwarranted and unjustified. I further asserted that if my telephone service was discontinued and the emergency communication network between myself and the hospitals in Jersey City and Newark, New Jersey, of which I am a staff member was interrupted compromising the competent treatment of my patients in these hospitals, I would institute litigation against the phone company for actual as well as punitive damages. I requested that until I receive the information and this matter was settled, my service be maintained. To date, I have not received the requested material. On Monday, March 4, 1974, I received another message from Mr. Binanky stating that my 24 hour grace period had elapsed, I still was utilizing my answering machine without their interface device, and therefore, my service would be discontinued. I then contacted the central office of the New Jersey Bell in Newark, New Jersey and attempted to speak with Mr. Robert Kleinert, President of the New Jersey Bell. Mr. Kleinert was unavailable, so I left a request that he call me back, and I spoke with a Mr. Messina. Again I asserted my desire to see factual verification that my machine, or any similar machine, was damaging to their system. I also repeated my request to have my service continued until this matter was settled and that if they did choose to discontinue my service, I would be forced to institute litigation against New Jersey Bell. I asked Mr. Messina, rhetorically, what viable alternative for telephone service they could suggest, knowing full well that they are a monopoly and there is no other service available as a second choice. Mr. Messina offered only nebulous platitudes and analogies, but told me he would get back to me; however, as of this date I have not been contacted by Mr. Messina. I was next contacted at home by a Mr. W. E. Baunach, Manager of the Regional New Jersey Bell Office. I returned Mr. Baunach's call on Tuesday, March 5, 1974. I restated my position and repeated my request for scientific verification that my machine or even any similar machine was, in fact, dangerous to their system. No agreement was reached during our telephone conversation and an appointment with Mr. Baunach at my apartment was arranged for Thursday, March 7, 1974, at 6:30 p.m. A Mr. Roger Henkle, whom I understood to be a maintenance and service supervisor, also attended this meeting. I posed several questions to Mr. Baunach and to Mr. Henkle: 1) Why were they unwilling to supply verification that my machine "might be harmful"? 2) Assuming proper installation of the answering device, and operating under the assumption that a coupler was necessary for protection of the system, why must the coupler be owned and maintained by the telephone company? 3) If the coupler was for the protection of their system, why should I have to pay for their protection? 4) Why was the company's tariff on file with the New Jersey Board of Public Utility Com-

missioners not administered uniformly to all customers? I informed Mr. Baunach that I was aware of several situations where individuals and corporations were utilizing the identical type of answering device which I use and without the benefit of any protection from an interface device. 5) Why was it possible for Bell Systems to use the identical Codaphone Machine which I used, without the necessity or benefits of an interface device. 6) Why, when I would use my machine without an interface device, it would be harmful, whereas, when they use their Codaphone Machines, without an interface device, it would not be harmful.

It is my understanding that in December of 1972 Mr. Bermard Strasburg of the Federal Communications Commission wrote a letter to AT&T expressing his opinion that, as chief of the Common Carrier Bureau, he felt Bell's insistence on an interface device for Codaphone equipment constituted "a question of lawfulness". The reason for this, as I understand is that Bell Systems, themselves, lease and install approximately \$8 million worth of Codaphone equipment without the benefit of an interface protective device. In fact, Mr. Baunach did admit that the company does use Codaphone answering devices often, without an interface device. He stated that Bell Systems could not afford to test all the individual machines in use today and that he was unaware if any test had ever been performed on answering machines to substantiate that they were, in fact harmful to the Bell System's equipment. I informed Mr. Baunach that I was asked to testify before the New Jersey Board of Public Utilities Commissioners in Newark, New Jersey, on March 14, 1974. I said I felt it was not unreasonable to delay any discontinuation of my service until the results of the hearing were known. Mr. Baunach rejected this proposal. He then gave me a copy of a letter which I have enclosed, dated March 1, 1974, in which he referred to "our discussion and telephone conversation of March 1, 1974." I did not contact Mr. Baunach initially until March 5, 1974. I have continually maintained the position that, given scientific verification of fact that my machine is actually or potentially harmful to the Bell Telephone System equipment, I would gladly cooperate with them, and order the installation of the interface device. Various other New Jersey Bell personnel have claimed that they could not afford to investigate all existing answering machines as far as safety and potential damage to their equipment. However, they *are* willing to claim harm to their system, albeit, unverified. I was also told that they could not afford to mail such scientific data to people utilizing answering machines. I find it hard to believe that, with inter- and intra-state phone rates as they are, the profit margin of the Bell Telephone System does not allow for a 10 cent stamp to mail me data verifying that I own a potentially or presently harmful electronic device. I find it extremely objectionable that they are willing and able, to discontinue my service arbitrarily, because: 1) I have chosen to question the basis for their statement that my machine is harmful. 2) I have been so rash as to ask for verification that my machine is potentially, or actually, harmful, and 3) I have been so unreasonable as to ask that an agreement be reached before any decision is made as to discontinuation of my telephone service. They are unwilling even to wait until after the above mention PUC hearing, and again have given me a 24 hour grace period and then threatened to discontinue my service. I advised Mr. Baunach that I would be acting under legal council and I would inform him, before this 24 hour period lapsed, what my decision would be. Subsequent messages to Mr. Kleinert have been ignored.

I would appreciate any suggestions you might offer as to other courses of action that I may take. Thank you very much for your attention and consideration of this matter.

Yours very truly,

DR. ROGER J. HARRIS.

MARCH 1, 1974.

A. J. HARRIS,
Fort Lee, N.J.

DEAR MR. HARRIS: As requested, the following outlines the Telephone Company's policy with regards to the attachment of an unauthorized device to telephone lines serving your premises. Under existing Telephone Company Policies and Tariffs, direct electrical connection of customer provided facilities to the Company's System are permitted only where the Company provides a

connecting device. Since this device protects the Exchange and Toll Network from any operation of the customer-provided equipment that might be harmful, it must be owned and maintained by the Telephone Company.

The Telephone Company has many different types of connecting arrangements. Therefore, the type of connecting arrangements that you will need for your customer-provided equipment should be specified by the manufacturer of your equipment.

For these reasons, the Company's Tariff filed with the New Jersey Board of Public Utility Commissioners, which must be administered uniformly to all customers:

Permits the direct electrical connection of privately-owned equipment to its facilities only through connecting arrangements provided by the Telephone Company.

Requires that the customer-provided equipment must comply with certain minimum network protection criteria.

Provides that the Telephone Company may suspend or terminate service if there is any violation of the rules and regulations governing the service furnished.

As stated, our tariff provides for suspension or termination of service and removal of our equipment if there is a violation by a customer of the rules and regulations governing the service and facilities furnished. We request that you make immediate arrangements to obtain the proper connecting equipment by contacting our Business Office and to remove the unauthorized equipment pending installation of the appropriate connecting unit. As discussed in our telephone conversation of 3-1-74, your service may have been suspended before this letter is received.

Very truly yours,

W. E. BAUNACH,
Manager; Bergen Mall BSC.

STATE OF NEW JERSEY,
DEPARTMENT OF PUBLIC UTILITIES,
BOARD OF PUBLIC UTILITY COMMISSIONERS,
May 20, 1974.

RICHARD C. SCHRAMM, ESQ.,
Newark, N. J.
H. LADDIE MONTAGUE, ESQ.,
Philadelphia, Pa.
DR. ROGER J. HARRIS,
Jersey City, N. J.

Re: Essential Communications v. New Jersey Bell—Docket No. 739-741.

Gentlemen: The Board has scheduled 2:00 P.M., Tuesday, May 28, 1974, at the Board's offices, Room 208, 101 Commerce Street, Newark, New Jersey, to hear oral argument on the record from the parties relating to the Board's Order of May 9, 1974 directing Bell to refrain from disconnecting the present telephone arrangement of Dr. Richard J. Harris.

Very truly yours,

RALPH C. CAPRIO,
Secretary.

To date, the ruling has not been reversed. Also, the machine continues to operate faultlessly. Please let me know if I may be of any other assistance.

DR. ROGER HARRIS.

STATE OF NEW JERSEY,
DEPARTMENT OF PUBLIC UTILITIES,
BOARD OF PUBLIC UTILITY COMMISSIONERS,
Newark, N. J., May 10, 1974.

Docket No. 739-741

ESSENTIAL COMMUNICATIONS)
SERVICES INC. V. BELL)
TELEPHONE CO.)
By the Board:

Whereas, the Chief Hearing Examiner this day has recommended to the Board in open Court on the record that Bell Telephone Company (Bell) be

ordered by the Board not to disconnect the telephone service of one Doctor Harris, because he uses an answering service recording system without a Bell supplied interface device; and

Whereas, Bell has by letter of W. E. Baunach, Manager dated April 23, 1974 to Doctor Harris stated that his service would be suspended on Tuesday, May 7, 1974; and

Whereas, Bell has refused to extend this time period or assure the examiner that Doctor Harris's service would not be terminated during the time necessary for the Board to receive and review the hearing examiner's recommendation; and

Whereas, Doctor Harris is a professor of Oral Surgery at the New Jersey College of Medicine and Dentistry and on emergency call for accident victims twenty-four hours a day and requires competent, working, answering service; and

Whereas, the hearing examiner recommendations made this day require a reasonable time to be transcribed, received and evaluated by the Board and the Board may require further time to examine the record of these proceedings; and

Whereas, the examiner has advised the Board that extensive testimony has been taken and he has found that there would be a potential irreparable harm to the public health and welfare if Doctor Harris is disconnected; and

Whereas, the examiner has advised the Board that extensive testimony has been taken and he has found that the interface device when connected to Dr. Harris's Codaphone, in combination, render the Codaphone incapable of working effectively, (such as, incoming calls will intermittently not be picked up and recorded but will "ring through", including calls by Dr. Harris to pick up messages left by patients);

Therefore, it is on this day, May 9, 1974 ORDERED that Bell refrain from disconnecting Doctor Harris's present telephone arrangement, including the Codaphone, until further order of this Board.

BOARD OF PUBLIC UTILITY COMMISSIONERS,

Dated: May 10, 1974

[SEAL]

JOEL R. JACOBSON,
Commissioner.

ATTEST:

RALPH C. CAPRIO,
Secretary.

I hereby certify that the within document is a true copy of the original in the files of the Board of Public Utility Commissioners.

RALPH C. CAPRIO,
Secretary.

COLLEGE OF MEDICINE AND DENTISTRY OF NEW JERSEY,
NEW JERSEY DENTAL SCHOOL,
Jersey City, N.J., April 24, 1974.

HON. MICHAEL J. MEHR,
*Public Utilities Commission
of New Jersey,
Newark, N.J.*

DEAR SIR: I must, once again, strenuously protest the arbitrary and vindictive harassment I have been subject to by the New Jersey Bell Company. Once again my telephone service has been threatened with discontinuation. I now have reached the limit of my patience.

On March 16th, I allowed, under protest, a "coupler" to be installed to my answering machine. This action was forced upon me despite New Jersey Bell's refusal, or inability, to factually verify the "potential danger" of my Codaphone to "their network". Mr. Shramm does admit that their coupler is not 100% compatible with the Codaphone device. This was proven fact, not just supposition, as the coupler New Jersey Bell installed in my apartment began to malfunction two weeks after installation. On occasion I was unable to reach my

answering machine; it simply would not answer. Other times, on the same day, it would answer. This meant that some people could not reach me and I sometimes could not receive messages left by people who did manage to get through to the machine. My initial attempts to contact Mr. Baunach, Manager, Bergen Mall Bell Systems Company, were fruitless. At first I was told he "was out", then, he "was ill", when in fact he was away on company business. When I did succeed in contacting him he sent out a repairman. The machine and coupler would not work for the repairman. After several adjustments, the machine worked, but for less than 12 hrs. It malfunctioned again the following morning. The next night a repairman, the service supervisor and Mr. Baunach came to my apartment. Upon my insistence the coupler was removed. The answering machine was then reattached in its original, trouble-free manner. It has operated, without problems, on a 24 hr. basis, since Friday, 19 April, at 7 p.m., just as it did for 7 months prior to the installation of the coupler.

I feel I have made my point. New Jersey Bell has yet to prove a need for the coupler. Moreover, they do not have a reliable coupler capable of not causing my answering machine to malfunction. Yet they still insist on installing a coupler, at my expense, and at the jeopardy of the emergency communication network between my hospitals, my patients, and myself. They are threatening to discontinue my phone service if I don't "knuckle under". The use of such coercion is totally abhorrent to me. I feel I have been more than cooperative.

It is with the foregoing facts in mind that I respectfully request that New Jersey Bell be enjoined from further harassment by the interruption of my telephone service, at least until a final decision from the hearings is reached.

Thank you very much for your prompt consideration in this matter.

Respectfully yours,

DR. ROGER J. HARRIS,
Assistant Professor of
Oral and Maxillofacial Surgery,
Director of Anesthesiology.

Enclosure:

NEW JERSEY BELL,
Paramus, N.J., April 23, 1974.

Dr. R. J. HARRIS,
Fort Lee, N.J.

DEAR DOCTOR HARRIS: As a result of test calls made to your telephone (461-5037) it is apparent that customer-provided equipment has been improperly reconnected to the telephone network. On April 18, 1974 you told me you planned to have this done. Your telephone is again being answered by an automatic answering device not furnished by the Telephone Company and for which we are not presently providing a connecting arrangement. You will remember my visits of March 7 and March 16 at which time I explained our Tariff requirements—that customer-provided equipment involving a direct electrical connection to our facilities must be connected through a connecting arrangement provided by the Telephone Company. You will also remember I delivered, during my March 7 visit, a copy of my letter of March 1, 1974 outlining our Tariff provisions as outlined in Tariff P.U.C.-N.J. No. 1, PART I-GENERAL, Section 30, Second Revised Page 11, Paragraph III. E.l.a. On April 18, at your insistence, we removed our connecting arrangement installed March 16 and left your privately-owned Code-A-Phone disconnected from the network. As you know, our Tariffs are developed to protect the Telephone network and the services this network provides to all customers of the Telephone Company. As you also know, the direct electrical connection of your answering machine to the network violates our Tariff.

We are most willing to work with you in correcting this violation. This may be accomplished by obtaining a connecting arrangement from the Telephone Company or by agreeing to cease using your customer-provided equipment in connection with the telephone network. I would be glad to arrange for the installation of the required connecting arrangement.

If you do not provide us with written notification by Friday, May 3, 1974 that the violation has been corrected by one of the means specified above, then, as provided in the Tariffs, your service will be suspended Tuesday, May 7, 1974.

Fully recognizing the importance of your telephone service, I look forward to receiving your letter and satisfactorily resolving this matter. Should you have any questions, please call me on 692-9958.

Very truly yours,

W. E. BAUNACH,
Manager, Bergen Mall BSC.

[From the Daily Journal, Apr. 19, 1974]

DEALER DISPUTES BELL ON FAULTY COUPLERS

By Victor Sasson

NEWARK—The N.J. Bell Telephone Co. was informed last year that malfunctions were resulting from a device it forced upon purchasers of automatic telephone answering sets sold by competitors, a distributor of the machines testified Thursday.

Joseph R. Conklin, a Wyckoff-based dealer of Code-A-Phone answering sets, appeared to contradict a statement Wednesday by a telephone company lawyer that N.J. Bell was unaware of problems caused by the devices until last month.

His sworn testimony also seemed to weaken N.J. Bell's argument that the device—a coupler—is needed to protect the telephone network from equipment not manufactured under the same high standards of the telephone company.

Conklin said telephone answering sets available from N.J. Bell and its competitors are built on the same assembly line at the same time by a West Coast firm.

The young, self-made businessman appeared Thursday at the final hearing this month before the State Board of Public Utility Commissioners (PUC), which is being asked by a Kenilworth Code-A-Phone dealer to wipe out the "unreasonable" telephone company leasing charges for the couplers.

More hearings on the dispute between Essential Communications Systems Inc. of Kenilworth and N.J. Bell are scheduled for next month.

Essential is arguing that the couplers—also called connectors or interfaces—represent harassment by the telephone company of customers of competing firms. N.J. Bell threatens a cutoff of service unless it installs the device.

Only purchasers of telephone answering sets sold by independents are required to lease the couplers, at a charge of up to \$6.50 a month and an installation fee of \$25. Answering sets obtained from N.J. Bell need no coupler, the company says.

Since a federal ruling in 1968, the Bell Telephone System has been fighting off challenges from independents who want to hook their products into telephone lines without the restriction of such leasing charges for couplers.

N.J. Bell defends the need for the couplers by saying they protect the telephone system from noise and surges of electric current that power foreign equipment—from telephone answering sets to massive computers. The effects of the tie-in equipment reduce the overall quality of telephone service, according to N.J. Bell.

In testimony Thursday, Code-A-Phone dealer Conklin said he was "impressed" during a visit to the plant of Ford Industries Inc. in Portland, Ore., supplier of the answering sets.

He said the only component difference he could discern in sets destined for Bell and independents was a Bell insignia affixed to some of the machines after manufacture.

Richard C. Schramm, N.J. Bell's attorney, time and again objected to this and related testimony from Conklin as hearsay in an "area of strict proof" and vowed, he would "go to Portland" in an effort to determine the facts.

On the problems caused by the couplers, Conklin said he first contacted N.J. Bell sometime after June 1973. He said he spoke to employees who repair telephone equipment and others who he presumed were N.J. Bell engineers.

Schramm again Thursday cross-examined John Jones, Essential's service manager, in an effort to show that two types of coupler cause no malfunctions in the answering sets.

Essential lawyers and officials continue to insist that no N.J. Bell coupler allows the answering sets to function completely.

The Kenilworth firm also has filed a federal suit in Camden, alleging that the Bell Telephone System is attempting to monopolize the sale of telephone equipment. The suit is pending the outcome of the PUC hearings.

[From the Daily Journal, Apr. 18, 1974]

DEVICE CAUSED MALFUNCTION—BELL ADMITS PHONE ERROR

By Victor E. Sasson

* * * * *

"There seems to be a lack of communications," PUC hearing examiner Michael J. Mehr commented after the disclosure. "God help anybody who's caught in the middle."

Essential Communications Systems Inc. of Kenilworth is claiming before the PUC that hundreds of its customers were threatened with a cut-off of telephone service unless they leased a coupler from Bell for answering sets supplied by Essential.

Those customers were charged up to \$6.50 a month and an installation fee of \$25 by the telephone company for the couplers, also called connectors or interfaces. However, if the telephone answering set is obtained from N.J. Bell, no such coupler is required.

Essential Communications is appealing to the PUC to wipe out the leasing charges as unreasonable, claiming that the couplers represent harassment of its clients.

Schramm, the lawyer for Bell, contended Wednesday that the company has identified two types of couplers that cause no problems with the Code-A-Phone answering sets supplied by Essential.

He said it wasn't until an Essential customer appeared at a hearing on the dispute in March and explained the problems he was experiencing with a telephone-company-supplied coupler that Bell looked into the effects of the device.

Schramm said the Kenilworth company itself never informed Bell that customers were experiencing problems after the couplers were installed.

Schramm said Bell told Essential's West Coast supplier what couplers work best with the answering sets.

Peter Murr, president of Essential, testified Wednesday that he was advised by the supplier to "wire around" couplers that caused problems.

H. Laddie Montague, a lawyer for Essential, said his client's customers may be due a rebate from Bell. He said the coupler they were required to lease is the most expensive model, while one of the two that reportedly causes no trouble is among the cheapest.

Bell claims the couplers are required to protect the telephone system from electric current that powers the telephone answering sets and screen out excessive noise. The company has never proven, however, that the telephone system needs such protection from products that are not manufactured under its control.

The sets answer the telephone with a recorded message and record a message from the caller.

Problems caused by the coupler, according to Essential officials, are a breakdown of the sets and the machines running on and exhausting the recording tape.

Moreover, Essential and other suppliers of products that hook into telephone lines claim the coupler is a duplication of a built-in device that does the same job.

All telephone answering sets made after 1972 by Ford Industries Inc. of Portland, Ore., Essential's supplier, have the built-in connector. More than half of the Kenilworth firm's 693 customers own the newer models, but they've been required to lease an additional coupler from Bell. One model of the answering set, No. 700, costs \$895.

Last week, the California Supreme Court overturned a California Public Utilities Commission decision in a similar case. It ordered that state's telephone companies to supply the couplers at no charge to customers of a firm that supplies telephone tie-in systems.

John Jones, Essential's service manager, testified Wednesday under cross-examination on how he ties in the answering sets to telephone lines and circumvents couplers supplied by N.J. Bell.

Telephone company officials have asserted a decision in favor of allowing Essential and other independents to telephone lines free of N.J. Bell control could cause boosts for basic service.

Lawyers for Essential Wednesday strongly discounted that claim and said a New York telephone co. disclosed rates probably would go down for all types of service because of increased competition.

[From the Daily Journal, Apr. 17, 1974]

PHONE DEVICES CHALLENGE STIRS RATE HIKE THREAT

By Victor E. Sasson

NEWARK—Higher costs for basic telephone service may hinge on the outcome of a dispute pitting a fledgling Kenilworth firm against the N.J. Bell Telephone Co., a telephone company lawyer asserted Monday.

Richard Schramm, the attorney, said that if independents are allowed to supply lucrative telephone-related services free of telephone company control N.J. Bell may have to "raise prices (for basic telephone service) to meet the loss of dollars."

He contended independents who offer products ranging from automatic telephone answering devices to sophisticated computers that are hooked into telephone lines are "taking the more profitable aspects" of the business and N.J. Bell will be "stuck with having to provide basic service because we are a utility."

The telephone company presently is being challenged before the State Board of Public Utility Commissioners (PUC) by Essential Communications Systems of Kenilworth, a distributor of Code-A-Phone, a telephone answering set made by Ford Industries Inc., N.J. Bell also buys the devices from Ford and leases them to subscribers.

At issue at PUC hearings that resumed Monday and will continue today and Thursday is a charge by the Kenilworth company that N.J. Bell unnecessarily requires customers who buy the device from Essential to lease a connector from the telephone company.

N.J. Bell charges a \$25 installation fee and from \$3.50 to \$6.50 a month for the connector, although it does not require the same connector if the customer leases the answering sets from the telephone company.

Essential is asking the PUC to wipe out these charges because they are unreasonable and represent harassment of its clients. Moreover, the connector renders the answering device inoperable to some degree and is a duplication of a built-in connector, the company says.

PUC Hearing Examiner Michael J. Mehr, who played host to a Seton Hall University Law School class at the hearing Monday, noted the dispute is a "test case" with "big money" and "serious issues" riding on the outcome.

He said it focuses on whether a regulated company such as N.J. Bell can survive in the same market with unregulated companies such as Essential Communications that are free to pick the "gravy" while the telephone company must serve "everybody."

Meanwhile, Peter Murr, president of Essential, told a reporter N.J. Bell is attempting to "drag out (the hearings before the PUC) until we're bankrupt, which isn't too far off."

He was asked to react to a comment by a telephone company official to the reporter that the hearings will continue "to next Christmas."

Murr already has asked the PUC to relieve him of full responsibility for paying for the transcript of the hearings, a sum of several hundred dollars. Hearing Examiner Mehr said he will suggest to the PUC board that the telephone company pay part of the cost.

The devices sold by the Kenilworth firm answer the phone when the party is absent, supply a recorded message and then record a message on tape from the caller.

In testimony Monday, Murr was cross-examined by the telephone company lawyer on the quality control procedure followed by his firm before the devices are sold to customers and other technical matters.

Murr put off many of the questions, saying he isn't an expert, and referred them to John Jones, Essential's service manger, who is expected to testify today.

However, Murr alleged that the telephone company flubs on 90 per cent of the connectors that are the focus of the dispute.

Schramm, the telephone company lawyer, said the connectors were required to protect the telephone system and to make clear to customers of Essential and other firms that N.J. Bell will not assume responsibility for repairing equipment supplied by independents.

More than half of Essential's nearly 700 customers are forced to lease the connector from N.J. Bell officials said, while the remainder own older models manufactured before 1972 that actually need such an external connector to function.

The telephone company itself leases the answering sets to about 1,500 customers.

The battle between the Bell Telephone System and the independents has been brewing since 1965, when the Federal Communications Commission ruled that Bell was acting improperly in barring outside companies from tying into telephone lines.

Essential Communications also has filed a suit in federal court in Camden, charging Bell with violating the anti-trust laws and seeking treble damages. The court has asked the PUC to decide whether the charges to customers of the Kenilworth firm are reasonable before it takes up the suit.

The PUC hearings this week follow a series of conferences between the parties and hearings that were initiated by Essential in May 1973.

ESSENTIAL COMMUNICATION SYSTEMS, INC.

Kenilworth, N.J., April 6, 1973.

(Attention: Mr. Thomas Carter, President)

NORTH AMERICAN TELEPHONE ASSOCIATION,
Dallas, Tex.

DEAR MR. CARTER: Ken Johnson of Communications Design Inc. in New Jersey referred us to you and suggested that we keep you posted on our activities as follows:

We have retained the law firm of David Berger P.A. 1622 Locust Street, Philadelphia, Pennsylvania 19103 to represent us in a suit involving AT&T and New Jersey Bell.

The suit revolves around the fact that as CODE-A-PHONE Telephone Answering System dealers within the State of New Jersey, Jersey Bell is hampering our efforts to sell our CODE-A-PHONE products outright to the consumer, whereas they themselves connect the CODE-A-PHONE, the same CODE-A-PHONE products without the use of interconnect devices. This letter is really to inform you of our pending action and to let you know that we would appreciate any suggestions, help, or comments that you can give us that might aid us in our litigation.

Sincerely,

PETER H. MURR,
President.

March 18, 1972.

Mr. C. R. BENJAMIN,
*N.J. Bell Telephone Co.,
Red Bank, N.J.*

DEAR MR. BENJAMIN: We have a complaint from subject customer that your men cut wires leading to our CODE-A-PHONE Model 540 connected to subject telephone line. Would appreciate your calling us at 276-2400 with regards to this matter, before the next FCC Interconnect meeting which takes place on Tuesday, March 21, 1972.

We think it important that you be apprised of the latest developments pertaining to 15 FCC 2d 605, 18 FCC 2d 871.

Additionally, I'm sure you certainly don't condone the practice of your men cutting wires and threatening customer with discontinuance of his telephone service.

Sincerely,

PETER H. MURR,
President.

[From the Daily Journal]

UNFAIR BUSINESS PRACTICE—THE TELEPHONE COMPANY USES ITS POWER
AGAINST CONSUMERS AND COMPETITORS

The New Jersey Bell Telephone Co. is forcing those customers who purchase telephone answering machines from independent manufacturers, rather than rent them from NJBT, to secure an add-on device called a coupler for a \$25 installation fee and a monthly charge that adds up to \$78 per year. If the consumer rents a similar product from Bell, there is no additional need for a coupler. What it adds up to is an effort to bludgeon buyers of the answering sets into renting from Bell in order to drive the independent firms off the market.

The answering machines answer the telephone with a recorded message, and then record a message from the caller. Bell apparently has a full-scale Dick Tracy operation going on to detect non-Bell sets. Those who have them are told to get the Bell add-on coupler or their telephones will be shut off.

The State Board of Public Utility Commissioners (PUC) will rule momentarily on a precedent-setting case, which would permit a Fort Lee surgeon to run his machine without a coupler. Dr. Roger Harris ordered the Bell coupler removed from his non-Bell answerer because, he says, the contraption disabled his machine, preventing him from receiving emergency messages.

Bell claims that it needs to install the add-on devices to prevent electric power surges and excessive noise from damaging its equipment. Nevertheless, last April the telephone company admitted in hearings before the PUC that for more than two years its own devices caused malfunctions in automatic answering sets. The company now claims it has licked the problem and declares that its add-on devices have stopped wrecking the answering set equipment obtained from the other firms.

Spokesmen for some of the independents argue back that even if this were so, just because the Bell couplers may no longer disturb the innards of independently manufactured answering sets—itself a questionable claim, given Dr. Harris' problem—it hardly shows that the machines are necessary to protect Bell's lines. As *The Journal* has reported (April 18) "the company has never proven . . . that the telephone system needs such protection from products that are not manufactured under its control."

The PUC issued a temporary ruling on Monday that Bell may not disconnect the doctor's telephone, and will shortly rule on the broader question of whether couplers must be connected to the non-Bell telephones.

A ruling in favor of Dr. Harris could be the first step to encourage more independent outfits like Essential Communications Systems Inc. of Kenilworth to get into this field, provide more jobs for people in this area, and probably lower the cost of the devices.

New Jersey Bell should price its devices competitively, instead of coercing consumers and gunning down the independents through its quasi-monopolistic market position.

'Bell' Starr



EASTERN OUTBOARD PARTS CORP.,

*Fairfield, N.J., April 2, 1974.*PUBLIC UTILITIES COMMISSION,
Newark, N.J.

MY DEAR SIR: I am writing to you as I am rather upset over an injustice in the way the New Jersey Bell Telephone Company conducts their business.

For 12 years we have had on rental from the Bell System their Code-a-phone model 700; which is manufactured by Ford Industries out in Oregon. This unit has been installed directly to the phone lines without any major problems during this 12 year period.

Since our business has been increasing thru the years, we decided to add a second code-a-phone to our system. But, instead of leasing it from the phone company we purchased it directly from Essential Communications, who are distributors for Ford Industries. The units that we have purchased are identical to the ones supplied by the phone company.

After the units were installed the phone company advised me that I must have a special coupler for each unit in order to protect the phone company equipment. The installation charge is \$20.53. These couplers which I must rent from the phone company will cost \$6.42 per month for each one, and since I have 2 code-a-phones I will need 2 couplers.

I was advised that if I do not provide the specifications for the couplers within 24 hours that my phone service will be discontinued. I presently spend in the neighborhood of \$800.00 per month for service and have paid my bills promptly for 25 years. I think that this is a disgraceful way to be treated. Miss Smith was our contact at the phone company and while I do not know her address she was reached at the 672-9900 Ext. 102 number.

If the equipment that we are using was not the same and I mean identical, to the equipment being provided by the phone company or if it were equipment that was not endorsed by the phone company then I don't think I would have any complaint. But, with identical equipment why are they trying to take me over the coals for \$12.84 per month for no apparent reason.

I think this in some way must be a violation of Anti-Trust Laws.

We would appreciate it if you would look into this matter and advise us. Hoping to hear from you soon, we remain.

Yours very truly,

WILLIAM S. MONTAG,
Vice President.

EASTERN OUTBOARD PARTS CORP.,

*Fairfield, N.J., April 8, 1974.*HON. ANTHONY GROSSO,
Newark, N.J.

DEAR MR. GROSSO: Please refer to my letter of April 2nd, regarding the fact that the Telephone Company has forced us to install two couplers on some automatic answering devices, these are the same telephone answering devices which they had installed 12 years without couplers.

These couplers were installed on Friday which necessitated the reinstallations of the two code-a-phones which we now own. In trying to reconnect our code-a-phones to their couplers, we found that they had installed couplers that are not functioning properly. I know this can be construed as a simple error on their part but, it can also be taken as harassment because we did not lease this equipment from them.

When they finally come to install the correct coupler, I know that they will disconnect my automatic telephone once again necessitating several hours of lost service and inconvenience until we are able to get the company who sold us this equipment back here to reinstall the code-a-phones into the couplers.

I really think we are getting a rip-off, please help us. Thank you.

Yours very truly,

WILLIAM S. MONTAG,
Vice President.

TELE/RESOURCES INC.,
White Plains, N.Y., April 4, 1974.

MR. GERALD HELLERMAN,
Special Financial Advisor,
Senate Subcommittee on Antitrust and Monopoly,
Washington, D.C.

DEAR MR. HELLERMAN: I am forwarding this letter and copies of my previous correspondence with Mr. Bill Barrett of the FCC in response to Senator Hart's request for information regarding Telephone Company competitive policies and practices. For your further reference, I am also including information on some of the technical problems facing interconnect companies in their competition with the operating Telephone Companies. I hope this material is helpful to the Subcommittee's efforts, and I will forward further information as it comes to my attention.

CDH TECHNICAL PROBLEMS

Since the large majority of our interconnect sales are T/R System 32 electronic PABX's, we are primarily concerned with the installation and operation of the CDH voice connecting arrangement. That VCA continues to generate problems—as indicated below.

INADVERTENT DISCONNECTS

Toward the end of last year, while investigating cases of false disconnects on some of our installed PABX's, we determined, and AT&T's engineering staff confirmed, that CDH's installed at customers' locations which were long distances from the serving Central Office were subject to momentary opens of the CBS 1 and CBS 2 leads. When our electronic equipment senses these open leads (a condition supposed to occur only at the conclusion of a call), the station is disconnected.

The condition is further aggravated during periods of busy Central Office traffic when the line voltage drops—making the CDH even more susceptible to these false disconnects.

TOLL DIVERSION

In my earlier letters to Mr. Barrett, I catalogued some of the problems we have encountered with Telephone Company toll diversion. One of the subjects I mentioned was the minimum length of the CDH contact closure associated with the dialing of a toll call. Originally the closure time was defined by AT&T as 500 milliseconds, then changed to 250 ms, and now I understand, the specification calls for 50 ms. In actual fact, where New York Telephone Company has installed toll diverted trunks terminating in T/R System 32 PABX's, there is often *no* contact closure provided at all. For T/R to provide reliable toll diversion on the basis of such unreliable input is virtually impossible. And the problem is compounded by our inability to get accurate and timely information regarding toll diversion from New York Telephone personnel. The only way to find out how and if toll diversion will work for a specific customer is to have it installed. This uncertainty is unfair to Tele/Resources and its prospective customers.

LOW VOLUME

In some instances, after we install a PABX, our customers have difficulty hearing on some or all outside calls. Occasionally, judging from our transmission measurements, it seems likely that repeaters or other amplifying equipment have been removed from the trunk lines coincident with the installation of the customer-owned PABX's at existing locations or consciously omitted from installations at new locations. In these cases, we negotiate with the Phone Company to bring transmission volumes up to a satisfactory level. In other cases, the very fact that there is no automatic gain built into the CDH similar to that inherent in conventional "500 type" telephone instru-

ments, puts interconnect installations as a disadvantage. In other words, a telephone set directly connected to the Central Office line can compensate automatically (within limits) for continual or intermittent drops in transmission levels, amplifying the conversation when necessary to allow the user to hear at a constant, acceptable level. Interconnected PABX extension telephones, on the other hand, never get the opportunity to employ "automatic gain," since they are blocked from the Central Office line by the CDH device. In lieu of certification or passive connecting devices, the VCA itself should have automatic gain so as not to discriminate between interconnected and Telephone Company users.

RE-RING OPTION

The CDH has an option strap to allow or preclude the passing of ringing signal through to the PABX. Since our electronic PABX uses low voltage tone signalling, we choose the "No Re-Ring" option and generate the tone signalling ourselves. Unfortunately, the No Re-Ring option strap generates unwanted trunk noise, and puts the burden of another CDH-caused technical problem on our interconnected PABX equipment.

MAINTENANCE PROBLEMS

Much has been said regarding the comparative trouble rates for customer-provided and Telephone Company-provided equipment. AT&T alleges that interconnected equipment produces more frequent and more serious problems than Bell Equipment and thus poses a threat to the network (without the protection of VCA's). Based on the ongoing maintenance service that we provide by contract to *each of our more than 300 PABX customers*, however, we have reason to believe that the opposite is true. Since we offer as an integral part of our maintenance service to fix T/R troubles and to report and coordinate the repair of all troubles, customers more often than not report their Telephone Company troubles to us.

FREQUENCY OF TROUBLES

Although we have no record of Bell's total trouble experience with their PABX customers, we can nonetheless make some interesting observations. Tele/Resources contract maintenance rates have always been self-supporting, and as such, are often significantly higher than those quoted by other interconnect companies. Yet while T/R's maintenance rates fully cover its maintenance expense, these rates (translated into a per cent of equipment cost) are less than Bell's maintenance costs derived from the Uniform Systems of Accounts information on file with the FCC. And this favorable comparison exists in spite of the fact that the voice connecting arrangement accounted for 24% of all Telephone Company problems reported to T/R over a three month period (November 1973-January 1974) and the fact that coordination with the Telephone Company adds significantly to the time and cost expended by T/R's maintenance personnel. The costs of VCA repair and inter-company coordination are presumably not reflected in AT&T's maintenance expense.

SERIOUSNESS OF TROUBLES

A study taken of all trouble calls reported to T/R from November 1, 1973 to January 31, 1974 revealed the following:

Approximately 23% of all troubles reported to T/R were Telephone Company troubles.

Telephone Company problems accounted for 73% of all troubles reported to T/R that were not cleared the same business day.

54% of all Telephone Company problems reported to T/R took 2 to 5 days to repair.

The above comparison either indicates that Telephone Company problems are more severe than those caused by interconnect equipment or that Telephone Companies are providing "second-class service" to interconnect customers (on 30% of all problems reported by T/R to the Telephone Company, we received no callback whatsoever on the status of repair work) or both.

EXAMPLE-TELCO PROBLEM

Tele/Resources has not attempted to ascertain or document cases of service problems caused by Telephone Company deliberate action or extreme carelessness, but a recent letter (Exhibit I) by Falstrom Company, one of our

customers, is at least one example of serious Telephone Company-caused problems.

MAINTENANCE OF SERVICE CHARGE

By current tariff provisions, Bell Companies are entitled to render a "maintenance of service" charge whenever they are called to an interconnected customer's premises and find no trouble in their equipment (not when the trouble is *proven* to be in the interconnected equipment). See Exhibit II. This practice is questionable enough, but in actual practice, customers have been erroneously billed this charge simply because Telephone Company repairmen have not had the skill or experience to properly diagnose a problem in their equipment. Furthermore, we have had many experiences wherein our repairmen have had to explain the operation of CDH equipment to inexperienced Bell people. In these cases, the Telephone Company should be liable for Tele/Resources' expenses in helping diagnose and explaining how to repair problems in Telephone Company equipment.

UNFAIR TELEPHONE COMPANY POLICIES

Adding to the technical and service problems described above are examples of Telephone Company policies, practices and prices which we regard as discriminatory. I have covered some of these in previous correspondence with Mr. Barrett, but I believe they bear repeating here.

SEPERATE CONNECTING DEVICES FOR VOICE & DATA

Low speed data generated by a terminal which is electrically connected to a customer-owned PABX extension can physically pass through a CDH with no problem. It is, however, against the tariff to pass data through a voice connecting arrangement. Since there has not been a combined voice-data coupler available in the last 4 years, our customers have been precluded from using PBX stations to pass data over WATS trunks, tie lines, etc., whereas Telephone Company customers have had this option.

Now I understand that there will be a CBF coupler which can be added to the CDH to allow this service. New Jersey Bell, however, is estimating that the rate for the CBF may equal that of the CDH—thus imposing a double economic burden where none now exists for Telephone Company customers.

TOUCH TONE SURCHARGE

It is the policy of New York Telephone to apply a surcharge for Touch Tone service on Central Office lines serving customer-owned PABX's. This surcharge does not apply, however, to lines serving Telephone Company-provided PABX's. Instead, there is a modest surcharge applied directly to the equipment itself. This equipment surcharge is the equivalent of the additional cost an interconnect company must add to its equipment in order to make it compatible for Touch Tone. Therefore, the line surcharge applied only to interconnect is discriminatory.

CDH LOCATION

Southern New England Telephone Company requires that the CDH's be located no more than 20 feet from the entrance of the Telephone Company lines. No such restriction applies to the location of Telephone Company PABX equipment. This discriminatory policy imposes an extra cost on the interconnect company for running cable from the CDH location to the location the customer has chosen for his switching equipment.

Unfair Telephone Company Pricing

VCA RATES

The most onerous burden to the interconnect industry since its inception is the cost of the voice connecting arrangement. At a rate of \$9.34 per month per trunk in New York, the couplers can easily account for *1/3 of an interconnect customer's total ten-year cost* for PABX equipment and maintenance.

LOW COST TARIFFS FOR COMPETITIVE PBX AND STATION EQUIPMENT

In spite of the fact that their rates have gone up approximately 53% in the last 4 years, New York Telephone is introducing new PBX and key

equipment tariffs at pre-inflation prices. Only the competitive services are experiencing these price rollbacks, and the new rates are used only when competition threatens. Those customers not considering competitive proposals are usually served by equipment at the established, higher rates.

Tele/Resources, along with other New York interconnect companies, has challenged the latest PBX tariff before the PSC. We intend to show that the Telephone Company is using improper equipment costs and operating expense factors to arrive at a deflated revenue requirement. We further intend to show that no consideration was given to the lost revenue and premature retirement expense resulting from change-outs of existing, equivalent, higher-tariffed equipment.

COST OF LEASED LINES

New York Telephone Company retains the right to quote a special mileage rate for off-premise stations and tie lines connected to customer-owned equipment—even where the identical facilities are used as would be with Telephone Company equipment. Three recent examples where exorbitant prices were estimated for leased lines are:

Denby's Department Stores; Albany, N.Y.; Up to \$1500/Mo. in Special Charges

Skidmore College; Saratoga Springs, N.Y.; \$350/Mo. in Add'l Chgs.

Yonkers Savings Bank; Yonkers, N.Y.; Twice the Rate for TelCo Circuits

The Telephone Company representative in the last example was William Schalmaning. Further details regarding all 3 accounts are available if desired.

In each of these cases, the Telephone Company backed down, but only after our expenditure of much time, trouble and expense—and in one case, PSC intervention. We don't know how many jobs we have lost because of this dubious policy.

AUXILIARY LINE COUPLER COST

The cost for a C2ACP (the coupler to serve an auxiliary Central Office line) in Southern New England Telephone territory is approximately \$14 per month for common equipment and \$4/month for each line. Since we normally have only one or two auxiliary lines to an account, this rate is an unnecessary penalty on our customers—particularly in view of the fact that the common equipment referred to in this rate is the same as that used for CDH couplers. Usually no additional common equipment is required when the Telephone Company installs a C2ACP at one of our customer's locations.

Unfair Telephone Company Practices

INSTALLATION DUE DATES

New York Telephone like most operating companies, requires all requests by interconnect companies on behalf of their customers to be in writing. They do not have this requirement for customers with Telephone Company—provided systems. Besides the administrative burden it places on the interconnect company, this policy also has the effect of delaying installations for interconnect customers. For example, T/R's processing, typing and mailing a request for an auxiliary line, plus delivery time and processing time by the Telephone Company add 3-5 days to the normal 5-day interval. And this does not take into account the often extended delivery dates and installation time for the voice connecting arrangements.

Mr. William Von Alven of the FCC staff received an interesting insight into this problem when on January 13, 1974 he watched T/R prepare for an exhibit at the FCC the following day. In what proved to be an example of an all-too-familiar pattern, T/R unloaded, installed and tested a T/R System 32 PABX in one hour and waited four more hours until Chesapeake and Potomac repairmen got the two previously-installed trunks and CDH's in proper working order.

As only one example of an installation which typifies our recurring problems with Telephone Company personnel, I have included a rough chronology of notes tracing the installation job for Clifford Broman & Son, Inc. of Babylon, L.I. (See Exhibit III)

ADVERTISING

Although AT&T has complained about misleading advertising on the part of interconnect companies, we might level the same charge at New York Telephone Company. One recent newspaper advertisement touted a "New Generation of PBX's" and then went on to describe the 770 and 812 PABX's as if they represented a technological breakthrough rather than the modification of existing crossbar and semi-electronic systems which they are.

Another advertisement asks "Why Should You Talk to a New York Telephone Communications Consultant Before You Sign a Contract for a New Phone System?" The answer: "For Protection"—implying the harm which may befall a business in the event they go interconnect. In the body of the copy are other questionable statements like, "we take care of insurance and taxes." Including the sales and use tax?

CABLE PURCHASE

On the infrequent occasions where we inquire about purchasing in-place Telephone Company inside wiring, we continue to get exorbitant prices quoted only after long delays and harassment during the installation process. The latest such example occurred during our negotiations for and installation of the Holiday Inn at John F. Kennedy Airport.

SPECIFIC EXAMPLES OF UNFAIR SELLING PRACTICES

Trubin-Sillcocks—Centrex

In spite of the fact that Centrex Service offers a sharing of (usually Central Office) switching equipment among all Centrex station users (a practice confirmed by New York Telephone staff personnel), one "misinformed" New York Telephone salesman represented to one of our prospects that his Centrex offering would allow 100% simultaneous calling. He made the mistake of stating that misrepresentation in writing (Exhibit IV), and we could rectify the error. How many others make similar verbal representations which help them win the sale?

Salvation Army—Fear of Lost Donation

Working through Coopers and Lybrand, acting as consultant to Salvation Army Headquarters in Manhattan, we bid a PABX in competition with New York Telephone and lost the sale. The reason, according to the Coopers & Lybrand representatives, was strictly because the Telephone Company implied that it would have to withdraw its sizable annual donation to the Salvation Army.

Not only should this be an anti-trust violation, but it also raises the question of the legality of a donation in the first place. On what basis does the Telephone Company forward its subscriber's money on to charity?

Thriftpak Food Services—Fear of Poor Service

One prospective T/R customer, Thriftpak Services in Long Island, spends far more on lines and calls than on equipment. New York Telephone Company has made it clear to this customer, through innuendo and implication if not direct statement, that his service might suffer somewhat if he becomes an interconnect customer. As a result, the prospect has indicated to us, that much as he likes our equipment, he can't take the chance.

Sun Harbor Manor Rest Home—No Prewiring

This rest home in Garden City, New York desired a new telephone system as well as a separate private line on the same premises. New York Telephone at first refused to pre-wire his location for the private line if he bought a private phone system, but subsequently backed down after the customer requested that that policy be committed to writing.

As you can appreciate, the above examples are samples of unfair practices that come to my attention in the normal course of business. Like most interconnect companies, we do not have the time nor the resources to constantly uncover and pursue this type of activity. These examples are very likely just the tip of the iceberg, but they do show that Bell Operating Companies are engaging in some degree of anti-competitive activity.

As I stated in my previous correspondence with Mr. Barrett, Tele/Resources believes strongly in the concept and viability of interconnect—as do the more than 300 PABX customers and 15 interconnect distributors we serve. We seek to co-exist amicably with the Telephone Company (see my enclosed speech on that subject—Exhibit V). We are thankful for the opportunity to compete with the Telephone Company for the communications equipment business, but we must stress the need for the regulatory and legislative bodies to act to assure that the competitive arena is indeed a fair one. We ask for your diligence in seeing to it that the Bell System does not use her enormous size and monopoly power to stifle meaningful, innovative and beneficial competition.

Very truly yours,

WILLIAM A. JACOBSON,
Director of Planning.

PACIFIC NORTHWEST BELL,
Seattle, Wash., January 14, 1974.

MR. WILLIAM A. JACOBSON,
Director of Planning, Tele/Resources, Inc.
White Plains, N.Y.

DEAR MR. JACOBSON: I have recently been assigned the responsibility to act as chairman of a newly formed New Products Committee for Pacific Northwest Bell. It will be our charge to identify and study the available products and make recommendations for inclusion in our product line.

We recognize that we have gaps in both key telephone and PBX offerings that must be filled. We also have top level concurrence that we will go to the open market to fill these gaps. For these reasons I would appreciate your sending me any or all information on your product line.

My mailing address is: 1731 Exchange Building; 821 Second Avenue; Seattle, Washington 98104.

Thank you in advance.

Sincerely,

A. C. SMYTH,
Marketing Staff Supervisor.

FALSTROM CO.,
Passaic, N.J., March 22, 1974.

MR. PETER W. FASTNACHT,
Customer Sales Representative,
New Jersey Bell Telephone Co.
Clifton, N.J.

DEAR MR. FASTNACHT: On March 20th at 11:30 a.m., we had another trunk malfunction (intermittent false flashes and inability to use). This time on trunk #777-0015.

A service call by your #34 disclosed that a New Jersey Bell crew working at the intersection of Main and Brook had reversed wires on this trunk accidentally and then was unable to find them again to correct the condition.

I wish the record to show that in this instance as with three other recent occurrences, service calls were caused by New Jersey Bell equipment or personnel and in no way is related to the interconnect PABX switch which we own.

Yours very truly,

H. A. NICHOLAS BRIEGER,
Controller.

Exhibit II

Should the customer decide to recheck his equipment, this report should be excluded for those services measured under the EMSR Plan. Trouble reports on services measured by the Private Services Results Measurement Plan should be handled in accordance with existing Bell System Practices.

4.03 When a test on the circuit does not indicate a trouble condition and no repair visit is required the report should be coded as Test OK.

4.04 If the circuit shows a trouble condition which prevents the tester from reaching the customer, a repairman should be dispatched.

5. MAINTENANCE OF SERVICE CHARGE

5.01 The maintenance of service charge will apply to all premises visits required because of service difficulty which results from, or is caused by, customer provided equipment.

5.02 The maintenance of service charge will not apply to any trouble report which tests OK. The charge will not apply when the trouble is found in the Telephone Company equipment or facilities *or when in the judgment of the repairman, the trouble was not caused by the customer's equipment.*

The RSB or STC should recommend the billing of the maintenance of service charge on all cases requiring a repairman visit when the trouble was located in the CPE or in *the judgment of the repairman* the trouble was caused by or resulted from CPE.

There may be cases where, *in the judgment of the repairman*, the trouble was in the customer's equipment but the exact source could not be determined. These would be cases where the type of trouble report or the test indicates the trouble was in the CPE. These troubles should be closed out as found troubles and coded to Customer Action Code 6. The maintenance of service charge should apply.

5.03 In the event the repairman dispatched requires assistance of another repairman or supervisor or requires several visits in connection with the same trouble report, *only one maintenance of service charge will apply.*

5.04 The back billing of the maintenance of service charge may be authorized under certain conditions. For example: When a trouble is found in CPE which in the judgment of the RSB or STC Coordinator (7.01) accounts for recent previous visits where no charge was billed, he should recommend back billing for each of these visits. He should note in the Remarks section of Form E-5855 all pertinent facts. In addition, prior to forwarding Form E-5855 to the Accounting office, the RSB or STC Coordinator should call the local Business Office Manager or appropriate Sales Office Manager to alert him of the details of the recommendations including the dates of each visit. The local Business Office Manager or Sales Office Manager will consult with the Company legal department.

The RSB or STC Coordinator should await the Manager's instructions before forwarding Form E-5855 to the Accounting office.

5.05 A maintenance of service charge shall not apply on visits made to restore services or equipment which had previously been suspended due to CPE troubles.

6. TYPES OF POSSIBLE TROUBLES ENCOUNTERED

6.01 *Trouble in Telephone Company equipment or source not determined:* (Exhibit I Case 1) When the trouble is in the Telephone Company equipment, the repairman should clear the trouble. When in the judgment of the repairman the source of trouble cannot be determined, the report should be closed out to the appropriate disposition code. The designated RSB or STC Coordinator should review the findings and prepare a Form E-5855 in accordance with Part 7. The maintenance of service charge will not apply.

6.02 *Trouble in CPE does not interfere with network:* (Exhibit I Case 2). When in the judgment of the repairman the trouble is caused by or results from CPE but does not interfere with the network, service to others, or violate the network protection criteria, the repairman, should notify the customer. The RSB or STC Coordinator should review the report and prepare a Form E-5855 in accordance with Part 7. The maintenance of service charge will apply.

Exhibit III

BACKGROUND INFORMATION

Tele-Resources letter to Mr. T. Munn, dated October 12, 1973. We requested; outside move of three ground start trunks, outside move and change of service to ground start of auxiliary line. We requested; disconnect two EXOS and change them to CSV circuits; add CSV where auxiliary line was working.

The due date was requested for November 21, 1973.

SPECIFICS

Mon, Nov 19, changed due date verbally with Mr. Greenberg a control foreman at 731-9935. After surveying entire job I felt it would be unfair to the

customer to push for a completion date the day before a major holiday in anticipation of troubles or delays.

Fri. Nov 22 N.Y. Telephone Company dispatched an installer to start work. We did not receive any call as to where to place the CDH equipment. We specifically requested on our letter to Mr. Munn to add these remarks to the service order "Before starting work, call Mr. Tom Tully, Installation Manager, 516/328-3000. As it remains, the CDH equipment is at least twenty-five feet from the COAM equipment. There was a specific request that we will provide 24 Volt D.C. power to VCP equipment.

Mon. Nov 26, I called the cut-over off at 3:30 P.M. Auxiliary line 420-1045 then working at Bell St. could not be assured to me as in and working at 172 Cabot St. Nor could assurances be given that 72CSV4904 be delivered to Bell St. As it was, the N.Y. Telephone installer was not done with wiring up the CDH equipment till approximately 5:30 P.M.

Tues. Nov 27. First call to Control Foreman, Buddy De Angelis at 731-9935. N.Y. Telephone Co. installer not on job by 9:00 A.M. He was at another job and would be sent over.

10:45 A.M. One trunk converted to ground start, 249-4108. Other two trunks dead, except for incoming calls on N.Y. Telephone Key Equipment Phones. Trunk 420-1045 still loop start.

11:30 A.M. Only service now is on 249-4108 at 172 Cabot St.

12:00 A.M. Installer goes to lunch.

12:05 P.M. Situation becoming intolerable, called the Control Foreman and told everyone is at lunch and would I call back at one o'clock.

12:10 P.M. I called 731-9952, assuming this to be the division man. I was answered by a rather rude individual by the name of Corcoran (or something) The conversation went like this . . . "how did you get this number?" . . . "What do you think I am, a bureau foreman?" . . . I answered "No I hoped you were a representative of the N.Y. Telephone company that could help me. I was then referred to an Ed Lesley, RSB foreman. He at first balked at the time it was given to him and the fact that it was an installation problem. He did promise however that he would move it in the right direction.

1:00 P.M. Installer back, Re-informed of the continuing outage—he made the necessary referrals, and continued work on the CSV circuits.

3:30 P.M. Three trunks in and working at 172 Cabot St. Later I received an explanation that a reconman made an error.

4:00 P.M. CSV circuit to Bell St. (72CSV4904) still not in. Trunk 420-1045 still working loop start. I was informed that it would probably go ground start during the night and they could not finish the CSV circuit to Bell St. I said what can we do, as long as the subscriber can receive incoming calls on that number.

5:00 P.M. Installer leaves . . . two outside locations out of service; Sagnolli Road location and Powell Place location.

Wed. Nov 28. 9:00 A.M. Informed by owner that service to the Bell street location was cut off during the night. Called Buddy DeAngelis, control foreman, asking where the installer is. He is annoyed and told me that he has more than one job. I informed him *anyway* of these specific problems;

(1) 420-1045 still not in as a trunk

(2) CSV circuits still not in.

(3) 249-4108 now ringing again at 77 Powell St.

(4) 420-1045 went dead overnight at trailer (Bell St.)

He then stated that the field foreman Portmore would call me.

I referred this progress to our White Plains office. Miss Diane Weber then called Mrs. Curran of the N.Y. Telephone Company sales dept. A bridged conversation ensued in which De Angelis again re-iterated the fact he had more than one job. We requested that fine, but could they at least finish this one before starting ----- Partmore then promised the installer shortly.

10:25 A.M. Installer calls and says he is on way.

11:35 A.M. Discovered that while the CSV circuits were wired in the C.O. there was never any step ones from the field.

2:45 P.M. I called the Division Man at 935-9952. A Mrs. Welles answered and took the specific information from me that

(1) 420-1045 still loop start

(2) CSV circuits still not in.

(3) Bell St. Trailer—one man handling a six pair multi drop in a trailer yard by himself.

I requested a call back.

3:00 Help arrived for the N.Y. Tel Installer. I referred him to the Bell St. trailer.

4:15 P.M. I received a call from second-line Herb Kunsman. He asked why I called Gil Martins office. Being exasperated I tried to explain that the control foreman was getting me no where, the field foreman was of less service, I was forever in the dark, and the job was well past the due date. I explained that my first concern now was the 425-4015 trunk to be made to ground start. (Came about 4:20) My next concern would be the CSV circuit to Bell St. Then Sagnoli, then Powell. He tried to get me off the track by saying he had no access at Powell St. I find out a day later what he meant by a no access. * * *

Fri. Called Greenberg for status of CSV circuits. Man working on it. Call at 3:00 for status.

4:15

4:55—Called Contles Foreman installer wants meet on Mon. 8:00. Not getting ON from our equip. What is he trying to say?? Call—Permore 694-9948—over 1300 In Co They wires in D.L.L. pulse repeating but probably need pulse repeating???

Mon: Worked on CSV circuits—we ran one to Bell St. trailer—gave up on Telco.

Tues: Line to Sagnoli Rd. in—4:00 P.M. I'm informed.

Wed: 10:00 A.M. All three sets in & tested Sagnoli Rd.

4:00 P.M. Line open one side (Telco working on it) open transmit.

Thurs: Telco man on premises at 172 Cabot. Now our line feeding Chest Broman's house up on Permane. I will have to change Cono Sta. adapter. Telco still hanging in there.

Exhibit IV

NEW YORK TELEPHONE.
New York, N.Y., January 17, 1974.

Mrs. G. DEMURO,
Trubin Sillcocks Et. AL.,
New York, N.Y.

DEAR MRS. DEMURO: In regards to our discussion on January 16, we would like to reiterate that with the Centrex system we are proposing, you can have any combination of incoming and outgoing calls simultaneously equal to the number of Centrex Lines in your system. The present time interval for dial tone in our Electronic Switching Central Office is .0 seconds. This means you will have dial tone before the receiver reaches your ear.

The information given you by telereources concerning our dial tone access capability was incorrect.

Hope to hear from you soon.

Sincerely,

WALTER T. GODLEWSKI,
Communications Consultant.

Exhibit V

CO-EXISTENCE WITH THE TELEPHONE COMPANY

An Address to the North American Telephone Association, October, 1973

Eight weeks ago, when I was first approached about the possibility of addressing a group on the subject of day-to-day dealings with the Telephone Company, the prospect seemed reasonable enough. After all, T/R has been dealing with the Telephone Company for almost four years now.

Some of you may be aware that we are a regional interconnect company operating in the New York area and that, we have installed and are maintaining nearly 300 PABX's. (We are also manufacturing and distributing our own electronic PABX system).

At any rate, in that time we've had a great many dealings with the Telephone Company, and in general, we've been able to get things done without undue friction. Now, however, as I look at the results of the recent past, I'm afraid that things may get more difficult again.

As you know, the Bell System has recently adopted a more militant stance toward interconnect. Success on state regulatory fronts seems to have embold-

ened AT&T, and this militant posture is being translated into policies and practices which are questionable. In the long run, this approach may get the Bell System into anti-competitive hot water, but in the meantime it makes things tougher for us.

In the past, coexistence has been the order of the day. The FCC's word had become law, and the Bell System "is a lawabiding organization". Bell System policy-makers have supported the rights of interconnect, and when we've had troubles with Bell operations people, we've been able to point out standard Bell Policy as stated by upper management—and if necessary, bring the proper management person into play to enforce the policy.

Now with the "call to arms" sounded by Mr. DeButts, we don't have quite the lever we used to. We haven't seen the full influence on Telephone Company operations yet, but it probably won't be long before we do. It took a long time to get operating people to acknowledge that they had to work with us, but it probably won't take as long for them to do a turn-about (if that in fact is what happens).

This discussion leads us to probably the biggest irony of our industry. We are extremely dependent on our biggest competitor.

Probably no other business that competes hard with another company for a sale, must, after a successful effort, turn to the defeated competitor and solicit his help in implementing the sale and assuring a smooth installation.

The computer terminal business has been used as analogy, but even there, I can't visualize the "XYZ Computer Terminal Company" acting on a customer's behalf, calling up IBM and coordinating the entire computer installation—directing where the computers should be located, specifying all the options, and above all, assuring that IBM arrange its equipment in the precise fashion to match his terminal equipment.

Not only is that what we're faced with in the interconnect business, but in New York at least, we have to rely on precisely that individual for telephone coordination who has just lost the sale to us.

In essence, we must say: "We know you're not happy that we took a \$100,000 order from you, but now won't you please help us insure a smooth installation and avoid all the dire predictions you made about our ability to provide service during your recent sales presentation?"

In doing some research prior to this talk, I've learned that most Bell Companies take a more rational approach and assign a relatively disinterested special coordinator as the focal point for interconnect orders and requirements. This approach certainly cuts down on the human conflicts involved—even if it doesn't eliminate them.

This brings us to two more important points which are corollaries of the fact that interconnect companies are rependent on the Telephone Company: The first is a law of nature in this business (which those of you who are in business are painfully aware)—COORDINATION IS COSTLY—ADMINISTRATIVE EXPENSE IS HIGH. At T/R, we average 12-15 salesmen, and to back them up in dealings with the Phone Company, we require a full time staff assistant, 75% of a staff manager's time and significant amounts of time from myself and the officers of our company. And this doesn't consider the endless preparation and on-the-job hours which our installation and maintenance supervisors spend coordinating with the Phone Company. Unfortunately, these costs are a fact of doing business, and if anything, the time and expense involved is going to increase in the foreseeable future.

The second point is not a fact but a strong opinion. We feel that personal style of doing business is the best way. Wherever possible, we try to take a cooperative stance with telephone company operating people.

Of course, there will be many times when you have to bear down hard on the people you're dealing with or go above them—or even outside the Telephone Company for relief. This may well get faster results in the particular case at hand and may be necessary—but there will be other cases and other favors within the scope of the same operating people. To the extent possible, work with them on each case and inform the coordinator when you've got to bust things open. You've got to live with Telephone Company people—particularly when you work with a central interconnect coordinator. You don't have to love them, but it's more tolerable for both parties if you can foster a spirit of cooperation.

In the end, we feel that's the more effective approach, and the more professionally you accomplish your end of the bargain, the more grounds you'll have for mutual respect.

Another observation on this same subject. We feel it's very helpful, if not invaluable, to have a person with Telephone Company experience acting as your coordinator—someone who knows the organization and has contacts within it. Occasionally you might run across an ex-Telephone person who bears some kind of resentment toward his old employer and takes pleasure in making demands on former supervisors. You don't need this kind of person.

Before Sale

We and our customers are dependent on the Telephone Company—not only after a sale—but often before a sale as well.

We may need to know, for example, whether Touch Tone service is available in a given area—or toll diversion or message registration or WATS or limited exchange trunks. For some reason we may be interested in the type of serving Central Office or mileage charges.

The best way to obtain this information would be through a listing provided by the Telephone Company indicating in which Central Offices the various services are available. Unfortunately, New York Telephone refuses to provide such a list on the grounds that this is information for internal distribution only.

In a practical sense, this reticence has never really caused us a substantial problem. Touch Tone information is generally available from the Business Office, and the other information can usually be derived from personal contacts or by having the customer place a call to the Telephone Company in his own behalf. And as our company gains customers in each Central Office we continue to compile a log of our own.

Conceivably, however, this lack of information could hurt a potential sale. If, for instance, the Telephone Company refused to quote special engineering charges which might apply to an interconnected system, and as a result a customer balks at signing a contract, we have a case of discrimination—grounds for confrontation. The customer has a right to know what his costs will be before he buys.

One other point—we don't try to make it obvious to the Telephone Company that we're romancing a customer before a sale. There's no sense in waving a red flag in front of the bull—especially when he doesn't know you're in the ring.

After Signing

After the customer signs a contract with us, we follow the policy—which apparently is a requirement throughout the Bell System—of getting a letter from the customer authorizing us to act on his behalf.

I'm told that one time, before we did this as a matter of routine, we received a call from a Telephone representative telling us that he had received our letter requesting couplers for a customer and that he really didn't have to call us, but as a courtesy, he decided to tell us that he wasn't going to talk to us.

Exhibit I—Letter of Authorization

Some interconnect companies go as far as getting a power of attorney from the customer. We think this might pose more problems than it solves. We have our letter worded so that the customer can act on his own behalf (for such details as directory listings, service deposits, coin telephones).

On the other hand, we gently remind the Bell salesman against unhooking. It's against Bell's policy to try to undo a sale after a contract is signed, but we've discovered that official policy and actual practice don't always match.

Notice that the letter—and the letter which follows from us requesting specific service for our customer—is directed to the District Sales Manager. He in turn assigns the account to a local Communications Consultant—very often the same person who competed unsuccessfully against us for the account. New York Telephone, in particular, insists that the same man be the "sole interface" for the Telephone Company. Sometimes, I regard him in the same light as the VCA's—as another unnecessary interface.

All orders from our company to the Bell Company must be in writing—although the Telephone Company handles their confirmations exclusively by telephone. This, incidentally, is one of my major personal irritants. Trying to extract written policies, prices and due dates is virtually impossible. Solid answers are hard to come by, and this policy underscores the impression of evasiveness.

There are so many major issues to be raised, however, that this pet peeve becomes relatively less significant.

At any rate, the fact is that our initial order and any subsequent changes must be in writing and be accurate and all-inclusive. The Telephone Company

attitude often is, "if it isn't in writing, it isn't". There are a couple of key phrases here.

1. Never assume anything. If your message to the Telephone Company can be overlooked or misinterpreted, it will be. Include everything and even go so far as specifying ground start trunks for CDH's. Remember the lesson learned from the word ASSUME. In this case, we have the most to lose. A Telephone Company error hurts us and our customer far more than it hurts them.

2. The onus is on us. T/R has its own internal forms for assuring that no stone has been left unturned in designing or ordering service for our customers. Perhaps we've overreacted to the possibility of error. Certainly our salesmen think so, and we may soon consolidate the forms we have. But of course, its better to spend time catching a detail early than trying to straighten out a job during installation. As I've said, paperwork and administrative expense in this business is heavy.

Exhibit

Here are the typical forms and letter we use.

The 1st is used primarily for systems assurance—before the sale.

The 2nd adds telephone numbers and other details to the 1st to assure proper ordering—after the sale.

The letter ordering the equipment lists all the numbers and couplers involved. At the end—just in case we've missed any lines—we ask that no unidentified lines be disconnected. We also ask for confirmation and that the Telephone Company installation people call us when they go to the job.

We certainly can't rely on these requests for response. The responsibility rests with the interconnect company. In our particular case, our staff administrator places all the orders, but our installation manager gets involved as soon as possible.

When a Telephone Company installation foreman is assigned to the job, our field manager generally arranges to meet with him to arrange for VCA locations and other details. Often in his protective role as company representative, the Communications Consultant insists on meeting with our people by himself or in concert with Bell installation people. We generally don't find this to be a problem, and once the job is underway direct contact with installation people is assured.

When problems arise during an installation, we generally proceed up the ranks of the marketing department and/or the installation department to District, Division or Vice President level—as required. There are, of course, different avenues of appeal—which I'll talk about shortly.

After Installation

Assuming a smooth installation, (which I've suggested you should never do), T/R's internal responsibility shifts to our field services department.

Tele/Resources has the somewhat unique policy of requiring a service contract with every PABX sale. In the body of our contract, we state that T/R field service should be the focal point for all of our customer's telephone equipment troubles.

Rather than subject the customer to possible confusion and Bell's charge for "no trouble found", we have the customer always call T/R. For a type of trouble that could be caused by Telephone Company or T/R equipment, such as NO DIAL TONE, T/R dispatches a man. If it's found to be a Telephone Company trouble, the T/R man calls his dispatcher who in turn reports the trouble to "611" (Telephone Company repair).

Since the repair clerks don't understand interconnect, we generally represent ourselves as being from the company with the service problem. The sequence goes something like this.

"Hello—I'm Mr. Jacobson from ——— Co.

My telephone number is ———.

I am not getting a dial tone on telephone number 3/m. When you have fixed the trouble or have any further information, please call me at 3/m (T/R number).

We then make sure we get a commitment for a timely call back, and we put a big red flag next to this trouble on our log to follow up.

Our next call goes direct to the service bureau foreman whose number we have in file. Here we can explain the problem more fully and hopefully get a firmer commitment.

Actually we very often start with the repair bureau foreman depending on the seriousness of the problem. But we try to make the Telephone Company's procedures work wherever possible.

We've recently begun a series of personal meetings with local, district and division repair personnel to further explain our procedures and point out deficiencies in their repair operation (such as slow response, no call-backs, reporting trouble cleared or no trouble found when the trouble remains on the line, a lack of knowledge about VCA operation).

We also point out that 40% of our trouble calls are as a result of failure in Telephone Company equipment.

These meetings have been generally fruitful, and in certain districts, they have resulted in an education of the repair clerks allowing us to report troubles more directly by identifying ourselves and specifying that the trouble is in one of our customer's lines or VCA's.

I've mentioned that we try to work with Telephone Company people wherever possible. Perhaps, Pete Cunningham, our manager of Field Services, best epitomizes this approach. When he goes over an incompetent individual's head, it goes something like this:

"John Doe is working with me on ——— account, and he's trying, but I think he needs some help."

One way or another Pete gets action.

Problems

Policy: There are times, of course, when we run into problems which are so severe or where the time frame is so short that more drastic action is required. Frankly, these occurrences seem on the rise recently—encouraged, no doubt by State regulatory action and by AT&T's new militant posture.

We have found that many of the old and relatively dormant issues have made recent re-appearances. For instance, we have a current job that relies on a cable purchase and we've had grief over the price, the purchase contract, and now, the cutover procedures.

On another current job, the local installation foreman is refusing to run Telephone Company cable in the same oversize conduit as our cable.

On these issues, regardless of the fact that the Bell System would rather fight than co-exist, there is one overriding principle on which interconnect companies can rely for defense.

According to the anti-trust laws and, I believe, the Communications Act, a business is forbidden from discriminating against any class of customers. The Bell System readily acknowledges this obligation. Interconnect customers are a class of customers, and as such are entitled to the same services as other customers. With non-discrimination as a guiding principle, we have solid grounds for appeal to Telephone Company management and to state and federal regulatory bodies.

T/R has only rarely had to appeal to the regulatory bodies in the past, but to the extent Telephone Company policy makers lose sight of the non-discrimination principle, we may have to be a more frequent visitor to Albany in the future.

Two weeks ago, for instance, New York Telephone Company attempted to apply a surcharge of \$30 per tie for VCA's on tie lines between two T/R-provided PABX's. This news reached us two days after the tie lines were due to be installed and one week before final cutover. Moreover, the tie lines could not be installed for another month.

Rather than signifying a local misunderstanding, we learned that this policy emanated from the highest levels at New York Telephone Company.

In this case, T/R could point to numerous precedents involving tie lines between customer-owned PABX's working without VCA's and to the fact that tie lines between Telephone Company provided PABX's would not incur similar extra charges—for the identical facilities.

We presented our position to the PSC staff and received support for our position and immediate relief to the customer.

This case had a happy ending, but it is just one example of the policy problems interconnect companies are faced with.

Physical Problems

Nor will I list all the Telephone Company-caused physical problems besetting us, but they are also substantial. Troubles with the CDH, of course, are

continually bothersome. Now we're beginning to get more frequent occurrences of cutoffs and low volume. We have one case where we're continually getting readings of -17 DB on our side of the CDH. None of these has yet forced us to extreme measures, but like the entire process of co-existing with the Telephone Company, they take time, money, manpower and heartache.

Conclusion

To sum up what I've been saying, I'd like to tie in with what has been a recurring theme at this NATA convention: Interconnection is at a crossroads. We've established ourselves as a force to be reckoned with, and in so doing, have aroused the attention and the ire of the giant Bell System.

We can co-exist with the Bell System simply because we have to. I've suggested some methods to accomplish this on a day to day basis, and I'm sure many of you employ similar methods. At the same time, individual interconnect companies over the long run will have a difficult if not impossible time prevailing against the combined resources of the Bell companies. There is a need now as never before to join forces with other interconnect companies and to share information and to fight joint battles.

In New York State, for instance, we have formed an association of interconnect companies and have begun lobbying and confronting New York Telephone at the state commission level as a group.

Furthermore, as a company, T/R has been documenting many of the cases of discrimination and harassment and forwarding the information to Ed Spievack and NATA and directly to Lou Feldner at the FCC. And under the direction of Dave Purdue's committee at NATA, a more complete fact-gathering program is underway. This information will be vital as a foundation for any future actions on a national scale.

We know we're here to stay, and we've got to do all we can to convince the rest of the world—particularly the Bell-shaped part of it—of that fact.

TELE/RESOURCES INC.,
White Plains, N.Y., August 30, 1973.

Mr. BILL BARRETT,
Federal Communications Commission,
Washington, D.C.

DEAR MR. BARRETT: In your letter of July 13, you requested clarification on three points. My comments on your three questions follows:

(1) In addition to the personal approach cited in my last letter, Southern New England representatives have solicited information on the System 32 from Mr. Pedler by telephone on at least 2 occasions. Since, on each occasion, we discouraged discussions before they became substantive, we really cannot comment further on SNET's equipment procurement process.

Incidentally, our latest inquiry from a Bell System Company came as a result of our Texas distributor installing their first T/R System 32 in Fort Worth last month. Soon thereafter, I received a call from Mr. Ron Bernier, a "communications specialist" for Southwest Bell. Mr. Bernier indicated that his company was constantly evaluating PABX products for possible purchase, and he would appreciate all the information I could supply on the System 32. I declined further discussion, while promising to send him a general brochure. Mr. Bernier's address is 1105 Commerce Building, Fort Worth, Texas 76102, (817) 336-6750.

(2) Tele/Resources does not see Telephone Operating Companies as a viable market for the System 32 since the technology of the System 32 represents a significant departure from conventional telephony. The station instruments are special four-wire electronic sets not interchangeable with 2-wire electro-mechanical instruments which represent an enormous plant investment for the Phone Companies. Double inventory, as well as training for and implementing new installation and repair techniques for the System 32 would require a major investment on the part of an operating telephone company. Furthermore, many technical people trained in telephony would find the System 32 a mystery, whereas computer technicians would be "at home" with the system. Personnel handling, therefore, would be another consideration.

The Telephone Company commitment would have to be extensive to overcome these problems, and Tele/Resources is not in a position to supply such a

commitment. We have enough of a market for the foreseeable future in the Interconnect industry—the market for which the System 32 was designed.

(3) As we have previously stated, the connecting devices introduce more problems than they profess to eliminate. For example:

Toll Diversion

AT&T's revised interface specifications for the CDH, dated October, 1970, call for a contact closure of at least 250 milliseconds of the CRV leads upon receipt of a battery reversal from the Central Office (indicating a toll call). We have found that the closure is not truly 250 milliseconds since the relay contact bounces open during the initial 100 milliseconds. This fact plus an earlier verbal understanding from Telephone Company personnel that the contact closure would be 500 milliseconds have necessitated two redesigns of the "toll diversion sensing" device within our PABX.

Disconnects

Another serious problem involves momentary contact opens in the CBS1 and CBS2 leads of the CDH unit while conversations are in progress. These contacts open for milliseconds, but our electronic equipment reacts so quickly to these opens that in-progress calls are disconnected. In some cases, the cut-offs caused by these false contact opens are so frequent that the customer's ability to conduct business is impaired.

In certain Central Offices, we are also experiencing a serious disconnect problem whenever we request Central Office toll diversion. In these cases, after a toll call or a call to the Telephone Company operator has been placed, a battery reversal is returned from the Central Office. This causes the CRV1 lead of the CDH unit to close as it should, but at the same time the CBS leads pop open, and a disconnect results. This problem has caused us fits in a number of installations, and Telephone Company personnel have so far been unable to solve it.

They have indicated to us that the problem stems from a design deficiency in the initial version of the CDH unit (designated as a 101A unit). This deficiency was supposedly corrected in the 101B version of the CDH unit (which is not yet generally available). We have had some 101B units installed at customer locations in an attempt to correct the above conditions, but to date, New York Telephone has been unable to get this version of the CDH even to pass dial tone through to our PABX. For several customers, we are still awaiting 101B units that work so that we can offer both toll diversion and the ability to place calls without being disconnected.

As you can imagine, the problem of disconnected calls is very serious, and in one case, will result in removal of an interconnected T/R PABX system—even after we have furnished the customer with evidence indicating that the Telephone Company connecting device was causing the problem. Since we could not get adequate correction of the problem from the Telephone Company, the customer decided to give up the fight and reinstall Telephone Company equipment.

Presumably Tele/Resources is discovering some of these deficiencies in the voice connecting arrangements before other interconnect companies because we are actively marketing the toll diversion feature and because the reaction speed of our electronic PBX is so much faster than that of electro-mechanical equipment—so that our equipment recognizes extraneous and improper contact opens of short duration—where other equipment would not.

Based on our experience over a 3½ year period, the concern of the Telephone Company and some regulatory bodies that interconnected equipment will result in economic and physical harm is misdirected. Rather, as illustrated above, the concern should be that the connecting devices now required by the Telephone Company are themselves resulting in economic and physical harm to communications users. I am hopeful that your inquiry will underscore this perspective.

I would also like to take this opportunity to update you on other issues currently under discussion with the Telephone Company.

Off-Premise Extensions and Tie Lines

Since my last letter, we have received a policy position from New York Telephone regarding the charges for "leased lines". They will charge our customers \$50 to "install" each circuit and 99c per termination per month even

when an existing circuit is being re-used. We feel this charge is high, but we do not propose to make an issue of it.

The mileage rate, however, is another story. New York Telephone Company's policy is that every circuit for off-premise extensions or tie lines connected to customer-owned equipment must be specially engineered, specially designed and specially priced. In effect, the pricing of such circuits is open-ended. Interconnect customers, therefore, face the possibility of paying excessive rates for off-premise stations or tie lines. Conceivably their costs for these lines could be ten times as much as if they were using Telephone Company equipment.

As you can see from the enclosed letter from Mr. Holler of New York Telephone Company, "tariff" rates are quoted for the installation charges and terminations of leased lines for customer-owned equipment. If the tariff can be quoted for that portion of the charge, it would seem reasonable that the tariff could also be quoted for the mileage portion. Telephone Company circuits are defined in the tariff on a functional basis, and there is no functional difference whatsoever in off-premise stations or tie lines whether connected to Telephone Company hardware or privately-owned hardware.

Under current New York Telephone Company policy, even when the facilities used to provide a leased line for an interconnect customer are the same as those used to provide a functionally equivalent circuit for a Telephone Company customer, the charges may be substantially higher for the interconnect customer. Nor can the prospective interconnect customer determine ahead of time what his charges will be. New York Telephone Company refuses to provide price quotations to a prospective interconnect customer until he has signed a contract with the interconnect company. This withholding of information and implied threat of higher costs may effectively dissuade many prospective buyers from going interconnect.

In a recent case in the Albany area, a New York Telephone Company representative tried to discourage a department store chain from purchasing nine interconnected T/R System 32's with the threat that surcharges for the 19 tie lines involved might well exceed \$1000 to \$1500 per month. The customer finally signed with Tele/Resources only after his consultant had assured him that such surcharges were illegal and that he would take personal responsibility for assuring that they were never applied.

This issue, of course, is potentially a very serious one for interconnect companies like ourselves. We presently have, for instance, a pending installation that will involve 150 off-premise extensions. Discriminatory surcharges would be disastrous for that company.

Our position is that mileage rates should be the same for the same services—whether provided by the Telephone Company or Tele/Resources. This equivalency could be defined functionally (as it is now done in the tariff) or technically. We are currently pursuing this issue on a case-by-case basis, and where we encounter significant discrimination, we will appeal to the proper regulatory bodies.

Location of Voice Connecting Arrangements

Interconnect companies are put at a disadvantage to the common carriers concerning the site of Telephone Company line terminations or connecting devices within the customer's premises. On this issue, New York Telephone Company has adopted a very reasonable posture and specifies that the connecting devices be no more than 50 feet from the customer's PABX switching equipment. Installation and maintenance of both the connecting devices and the switching equipment is thus simplified. With all the problems that arise in the CDH device, it is necessary to be able to determine quickly whether these problems arise on the Telephone Company or customer-owned side of the device. This can best be accomplished by a single repairman when the switch and connecting device are in close proximity.

SNETCo, on the other hand, has taken a hard line on this issue and insists that connecting devices or leased line terminations be installed no more than 20 feet from the entrance point of the outside Telephone Company facilities. Very rarely, of course, is the customer "telephone room" located within these narrow parameters. In our view, this is very clearly a case of discrimination, since a customer utilizing Telephone Company equipment is under no such narrow limitations. Furthermore, traditionally, companies like Western Union and ADT, who provide alarm circuits and special leased lines, have always been able to specify the termination location of Telephone Company facilities within the customer premises—so as to be proximate to the location of their

own equipment. In an effort to skirt this historical precedent, SNETCo has made these situations "special exceptions" by designating the alarm companies as "tenants" within the same customer's premises. We see nothing to justify this arbitrary designation.

Although we do relatively little business in Connecticut, we are considering contesting this tariff through the Connecticut Public Utilities Commission.

Touch Tone Surcharges

Another area of discrimination—which I understand has been successfully challenged in some states—concerns the policy of applying surcharges to Touch Tone trunks if they terminate in customer-owned equipment. In New York, this surcharge is \$3.38/trunk per month. They only charge for providing Touch Tone on a Telephone Company PABX is that related to the telephone instruments and central switching equipment. The equivalent to this charge, of course, is included in the cost of the interconnect company's hardware. There is no surcharge on trunk lines, however, for Telephone Company PABX customers.

Although this discriminatory surcharge has existed in New York since the early days of interconnect, we have only recently seriously considered challenging it through the Public Service Commissions. The surcharge is now a major concern for Tele/Resources since, with the emergence of the T/R System 32 as the mainstay of our product line, approximately 80% of the telephone instruments we now install use Touch Tone service.

Purchase of Telephone Company Interior Wiring

In theory, an interconnect customer can purchase existing Telephone Company interior wiring, and his changeover to an interconnect system will thereby be more economical and convenient than it might otherwise have been. In practice, however, this is rarely the case. Quotations from the Telephone Company for selling interior wiring generally take months to get and are priced astonishingly high. It seems impossible to think that the cost of in-place wiring would exceed the cost of union labor to tear out walls and install new wiring—but this is virtually always the case. From our vantage point, the delays in obtaining price quotations for existing wiring, and the exorbitant prices finally noted, seem just another means to make the life of the interconnect companies more difficult.

Recently, we have brought our case in this regard to the staff people at the New York Telephone Company, and they have promised some relief. It remains to be seen whether the situation will improve.

I hope these comments provide further insight into the competitive environment and problems faced by interconnect companies such as ourselves. As you requested, I have necessarily pointed out our areas of concern. But please don't let these comments paint an entirely bleak picture. We strongly believe in the concept of interconnect, and we feel that our Company is proof of its viability. In spite of the problems I have outlined and others, we are conducting a profitable business, and at the same time bringing economic benefit and improved communications to hundreds of business customers.

We appreciate the opportunity to compete, and we ask only that the same rules apply to all competitive parties. We ask for correction of those areas where the Telephone Company is enacting and endorsing policies which discriminate against the interconnect customer, and the issues that I raise in this letter are examples of that type discrimination.

We appreciate your interest and stand ready to assist in any way the efforts of the FCC staff to continue to improve on the concept and implementation of interconnection.

Very truly yours,

WILLIAM A. JACOBSON,
Director of Planning.

TELE/RESOURCES INC.,
White Plains, N.Y., June 22, 1973.

MR. BILL BARRETT,
*Federal Communications Commission,
Washington, D.C.*

DEAR MR. BARRETT: I appreciated the chance to talk with you last week, and I have taken this opportunity to record some of the points that I discussed with you and to forward the back-up data you requested.

As I indicated, Tele/Resources has been in business since August of 1969. The company was founded as a subsidiary of EDP Resources, Inc.—a data processing service company with headquarters in White Plains, New York. At present, our company is privately held, with EDP Resources being a major, but not a majority, stockholder.

The company was founded with the intent of going into the Interconnect business and opened its first sales office in Long Island in March of 1970. Since that time, we have sold approximately 300 PABX systems totalling some 18,000 telephones. This activity has been centered in the New York metropolitan area, where we operate four sales and service centers. During our early days of operation, our primary products were PABX's manufactured by OKI Electronics, Inc. but today the mainstay of our product line is our own all-electronic T/R System 32.

One of our company's early goals was to develop our own proprietary product line, and we took the first step toward this goal with a feasibility study conducted in late 1969. In February, 1970 a development engineering contract was signed with Terminal Communications, Inc. of Raleigh, North Carolina for the development of an electronic, time-division PABX system. The result was the T/R System 32, which we introduced to the market in April 1972. The first system was installed in July of 1972.

Since introducing the System 32, we have sold 150 systems and installed nearly 100 of those. In addition, we have commitments from a limited number of distributors for purchases of 185 more systems through the end of 1973. Our own direct sales efforts plus those of our five distributors account for our total projected production through the end of 1973. We are very proud of the System 32 and strongly believe it represents tangible proof that communications users can benefit from the advances in technology stimulated by the Carter-phone decision. I have enclosed a sales brochure describing the System 32 and some of its major features as well as a copy of a letter "introducing" the system to the FCC commissioners and staff. (Exhibit I)

Bell System Inquiries

Naturally, our System 32 has aroused a great deal of interest from the Bell System. The latest written request for information came from Bell Laboratories and I have enclosed a copy of that letter and my reply. (Exhibit II) Unfortunately, we have not retained earlier similar requests, but I specifically recall one from Mountain States Telephone Company. In addition, we have received several verbal requests for information from Southern New England Telephone Company who (like Mountain Bell) represented themselves as possible buyers for the system. The latest of these requests was delivered to me personally at the International Communications Association in Boston on May 15 by Howard Rohloff and Robert Erkson of the Equipment Engineering Department of Southern New England Telephone Company. Since we do not view the telephone industry as a viable market for our product, we have declined any serious negotiations, but we do provide descriptions and demonstrations of the system to those who are interested.

We have also received, of course, a number of inquiries from the "Reader's Services" of the trade magazines, and we have many of these on file. I will make these available to you if you wish, but I assume that most of them stem from individual telephone employees looking for information on their own behalf. We generally do not respond to these inquiries.

Western Electric Supply Policy

During our conversation you expressed an interest in our relationship with suppliers—particularly with regard to Western Electric's distribution policy. As I indicated, in the past, Western Electric had distributed its products through Graybar Electric, and our company had purchased items—such as the 3A Speakerphone and Card Dialer—through that channel. Some time in 1970, however, Western Electric rescinded this policy, and Interconnect companies like ourselves could no longer purchase Western Electric equipment through Graybar. We have no documentation to illustrate this policy change, so I am afraid you will have to pursue that line of inquiry through Graybar if you are interested.

TelCo Rate Cases

As for your question regarding our participation in rate cases, our attentions have been devoted primarily to current business operations, and we have not

taken on the burden of legal intervention in rate cases to date. Rather we have been "interested bystanders" and have entered comments for the record where appropriate. I have enclosed 2 samples of such comments—one a letter from Charles Pedler to the FCC objecting to ATT's earlier proposal to equip all private lines with VCA's, the other a newspaper account of Mr. Pedler's comments regarding New York Telephone's latest rate increase request. (Exhibit III) The pertinent point in the New York rate case is the attempt by the Phone Company to shift revenue from competitive equipment (such as PABX's) to non-competitive services such as Central Office lines and message units. We are also a supporting member of NATA and are hopeful that that organization's legal efforts will help stem the tide of competition stifling tariff manipulation.

Bell Competitive Practices

Because your line of inquiry may also include Bell System competitive practices, I would like to outline here some of the operational difficulties we have had in working with the Operating Telephone Companies. Since approximately 90% of our PABX sales have occurred within the territory of New York Telephone Co., my comments will be directed to our experience with them. The underlying difficulty, of course, in dealing with the Telephone Company is that we and our customers are dependent on our largest competitor—for the installation of connecting devices and the provision of Central Office services.

To compound this basic dilemma, we must request these services from essentially the same people that we are competing with on a daily basis. Generally speaking, the Telephone Company's Communications Consultants have little incentive to see that our requests for service are handled efficiently. Furthermore, they very often are incapable of providing the technical information that we need to interface properly with their equipment (information regarding toll diversion, message registration, leased lines and data services, for example.)

New York Telephone Company has assigned a group of staff people to deal with Interconnect companies on policy matters, so we do have a "line of appeal." On the other hand, this group provides answers at its own frustratingly slow pace (as illustrated in some of the examples below) and usually balks at putting company positions in writing. Some of our specific dealings with New York Telephone on policy issues are as follows:

Off-Premise Extensions

Based on earlier information, we have been assuming that extensions from our PABX equipment which terminate at distant locations (often in Telephone Company key equipment) have been billed at standard mileage rates and with no installation charge except where visible work has to be done to alter Telephone Company equipment.

Three months ago, however, one of our customers presented us with a perplexing series of telephone bills showing different charges as applied to each of his eight off-premise locations—none of which had on-site work performed. When local Telephone Company operating people were unable to shed any light on this issue, I presented the question to New York company staff personnel. I was informed that basically each case is unique, and that the Telephone Company will decide what the charges will be on the merits of each case. I objected to this approach for obvious reasons and posed the basic question again in the letter to my Telephone Company staff contact dated April 18, 1973. I later followed up with copies of the particular customer's bills in an effort to stimulate or expedite an answer, but to this date, over two months have gone by without a satisfactory conclusion to this issue. Meanwhile our customer has continued to be dunned by the Telephone Company for payment of these non-explained bills.

I have enclosed some of the correspondence on this case for your review. (Exhibit IV)

Toll Diversion

As one of their service offerings, the Telephone Company provides "battery reversal" toll diverted trunks. When this service is provided a reversal is generated from the Central Office whenever a toll call is dialed, and PABX equipment at the customer's location can then recognize the reversal and deny (or allow) the call to go through. In the case of customer-provided equipment, the battery reversal will cause a contact closure in the CRV leads of the CDH voice connecting arrangement. Based on information pro-

vided us by the Telephone Company and specifications as outlined in the CDH manual, we designed our System 32 to react to such a contact closure.

During field tests, in late 1972, we found to our surprise, that calls which our PABX equipment allowed to override this contact closure ended up at a Telephone Company intercept operator rather than at their directly-dialed destination. The intercept operator would then complete the call. It took us nearly 6 months to get an answer from the Telephone Company on why this should occur, and that answer finally boiled down to "that's the way toll diversion works in certain C.O.'s—for our equipment as well as for yours." We then asked where (which Central Offices) we could expect toll diversion to operate that way. We were told that we would not be provided with this type of general information and that we must pursue each case on an individual basis through the local Communications Consultants.

Getting this information on a local basis from Communications Consultants who are even less familiar than were the staff people has been an ongoing headache. Furthermore, we have found that the CDH does not live up to its specifications in providing a solid contact closure for 250 milliseconds in all cases. Rather than attempting to have the Phone Company live up to its specifications, we have had to modify our equipment to cover that deficiency.

I have enclosed a letter on the subject which outlines the type of information we need. (Exhibit V) The same basic problems arise when we must determine whether any particular service (such as message registration, Touch Tone, direct inward dialing etc.) is available from a specific Central Office.

DC Powered Connecting Devices

Since "back-up power" has become more and more a necessity in the New York area, with the increasing number of black-outs and brown-outs, we planned to provide back-up batteries as a feature of the System 32. We first inquired on the availability of connecting devices which would be powered from customer-provided DC source rather than commercial AC power in March of 1971. We were told these devices would be available in late 1972. In actual fact, the first such units was installed just last week—and then only with the help of staff intervention.

The local sales people of New York Telephone are again unfamiliar with this "special item" (which I believe has the telephone code of VCP), and the staff people are now quoting, in general, a six to eight week delay in delivery.

From the beginning, the fact that CDH equipment is powered by commercial AC has been a major disadvantage, and the fact that the Phone Company has not aided in our attempts to overcome that deficiency is unconscionable.

Data-Voice Connecting Arrangements

According to the rules and specifications of the voice connecting devices, data communications traffic cannot be passed through these devices. In essence, then, customers with privately-owned equipment cannot make use of Bell's widely publicized Data-Phone service—the ability to send both voice and data over the same voice-grade telephone facility. There is increasing application for this service, particularly when a PABX customer has WATS service or Tie Lines to distant office locations, and he wishes to utilize these lines fully by sending both voice and data over them. Currently there is no way for PABX customers to do that if he owns his own equipment, without utilizing specially engineered and costly switching devices (which allow the transmission of voice through the connecting device and data through a different connecting device or directly to the line). Early this year, Mr. Stan Holler of New York Telephone Co. staff indicated to me that a combined voice-data coupler would be available through the New York Telephone Co. by August, 1973. I would be immensely surprised if this availability materializes.

Connecting Devices—Other Problems

In addition to the power failure, toll diversion and data communications problems mentioned above, we find that the connecting arrangement creates far more physical problems than it purports to prevent. For instance, we have evidence that the CDH distorts the inter-digital time of out-pulses generated by our tone-to-rotary dial converters causing wrong numbers.

Besides these subtle problems, our customers are plagued with malfunctioning CDH units. Most of the complaints about connecting devices voiced in

letter of August 28, 1970 (a copy of which is enclosed—Exhibit VI) re-
sults with us, and the need for a program of certification is greater than
ever. The situation is particularly ironic in light of Rochester Telephone Com-
pany's success with their "transparent" interface and New York Telephone's
own curious policy of terminating off-premise PABX extensions and tie lines
from manual PABX's in terminal blocks rather than voice connecting ar-
rangements.

Administrative Burden

I hope the above comments provide a perspective helpful in your current in-
vestigation. We have found it a necessity to assign two full-time people to
coordinate with the Telephone Company—seeking information and expediting
commitments. In addition, Tele/Resources field operations managers co-
ordinate with local telephone people at each of our four offices, and Mr. Pedler
and myself pursue policy matters. This is an inordinate administrative burden
for a company of 80 people.

We as a company are thankful for the opportunity that the Carterphone
decision has given us. We are eager to make new strides toward providing
the best communications equipment and service possible, and we are confident
that we can succeed. There are enough capital and logistical problems to
contend with in achieving that goal, however, without the undue administra-
tive burden imposed on us by the operating practices of our Telephone Com-
pany competitors.

We therefore hope the efforts of your Task Force can improve the com-
petitive environment—to the ultimate benefit of the communications user.

Very truly yours,

WILLIAM A. JACOBSON,
Director of Planning.

SELECTRON, INC.,
Portland, Ore., April 10, 1974.

Mr. GERALD HELLERMAN,
*Special Financial Adviser, Senate Subcommittee on
Antitrust and Monopoly, Senate Annex,
Washington, D.C.*

DEAR MR. HELLERMAN: Enclosed you will find a purchase order for a
private telephone system from East Rose Medical Clinic in Portland, Oregon.
You will also find the letter from the customer authorizing Selectron, Inc., to
act as their agent which was mailed to Pacific Northwest Bell Telephone
Company on March 29, 1974.

In response to our correspondence, Carol Ahlberg, a Pacific Northwest Bell
Communication Consultant, contacted the customer with new cost comparison
data and brochures. Copies of the cost data, covering two pages, and bro-
chures which include: *20 Questions, The Economics of Your Telephone System,*
and There's More to Your Telephone System than Meets The Eye, are en-
closed.

You will also find attached a letter from the Manager of East Rose
Medical Clinic defining the subjects covered by the Bell Communication
Consultant after East Rose Medical Clinic has ordered a private system from
Selectron, Inc.

Sincerely,

RAY STEVENS,
President.

Enclosures (9).

ACCEPTANCE ORDER

This private communications system is accepted for installation according
only to terms and conditions as put forth in this proposal dated 3-28-74 and
contained in pages one through thirteen.

Customer Purchase Order Nbr: _____.

Estimated Delivery Date: June 15, 74.

Estimated Installation Date: Following week.

The total installed system price is \$11,896.00.

Other Terms and Conditions: Customer has chosen to finance from source
of his choice.

Company: East Rose Medical Clinic.
 Address: 13830 SE Stark—Portland.
 By: _____
 Title: . Date: 3-28-1974.

K. A. COOLIN.

EAST ROSE MEDICAL CLINIC,
 Portland, Ore., March 28, 1974.

Attention: Marketing Department.

PACIFIC NORTHWEST BELL TELEPHONE CO.
 Portland, Ore.

GENTLEMEN: We have retained Selectron, Inc., under contract, as our exclusive agent in matters pertaining to our telephone service.

You are hereby directed to accept all orders for service or requests for information regarding our telephone service only from Selectron, Inc. All dealings are to be regarded as confidential and must not be discussed within or outside your offices. The monthly service billing and references to billing should continue to be sent to East Rose Medical Clinic.

This authorization does not prohibit East Rose Medical Clinic from acting on its own behalf. This authorization does however, limit Pacific Northwest Bell Marketing Department to respond *only to requests* made by either Selectron or myself.

You are further directed to address all correspondence and questions by mail to Bill Gressinger at Selectron, Inc., 0110 S. W. Bancroft Street, Portland, Oregon 97201 or by phone 503-223-7304.

Sincerely,

Topics discussed with Carol Ahlberg of the PNB phone system concerning our decision to buy our telephone equipment from Selectron:

She implied that our phone equipment might not last more than 7 or 8 years.

She said that the interface devices would definitely not be removed in the near future and had evidence to prove it.

The high cost of service from a phone sales company was stressed, compared to "free" service from PNB.

She said that the success of telephone equipment sales companies was forcing PNB to reevaluate their tariffs and to lower prices.

She said that the fact that PNB is a regulated public utility, their profit margin is limited.

DABE HANSON.

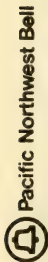
P.S.—Much of this information is substantiated in attached brochures.

	Mo.	I.C.
Comparable telephone system:		
7 Central office lines.....	\$228.20	-----
7 Charges for Touch-Tone.....	14.00	-----
1 Recorder coupler.....	3.75	-----
1 Residence listing.....	.50	-----
12 Additional listings.....	12.00	-----
Classified advertising.....	29.00	-----
Street address directory.....	7.50	-----
Total lines and listings.....	294.95	0
Equipment:		
1 Comline with Touch-Tone.....	27.00	\$52.50
27 Extra codes at \$2.25.....	60.75	270.00
14 12-button telephones.....	98.00	-----
2 30-button telephones with busy lamps.....	28.00	40.00
14 Station busy lamps.....	19.60	280.00
1 Paging access.....	7.75	100.00
20 Single line telephones for picking up the comline.....	35.00	400.00
1 Bell chime.....	.65	-----
Total equipment.....	276.75	1,142.50
Total lines, listings and equipment billing.....	571.70	1,142.50

Note. Selection, \$573.20 per month included.

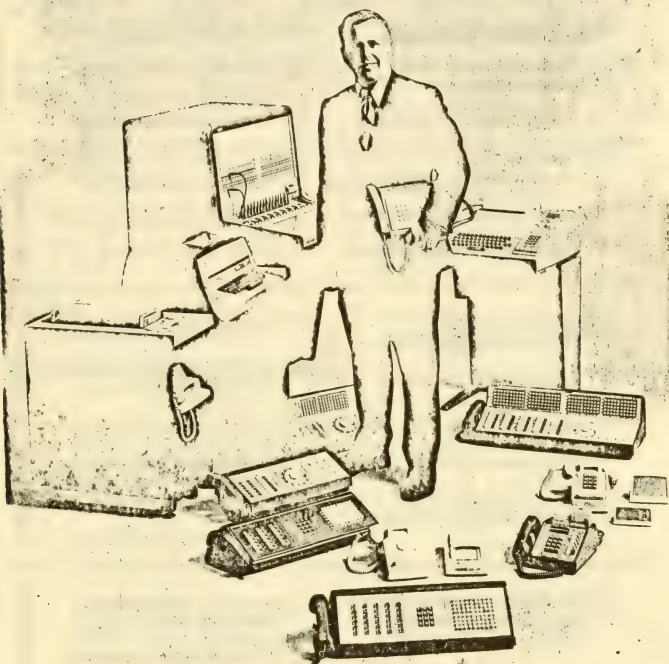
20 Questions

Some important questions to ask yourself and your supplier before you lease or buy any communications system.



- ☐ **1** Will it keep up with changes in communications? Can you add on new features such as PICTUREPHONE® service or other new developments at a reasonable cost?
- ☐ **2** Will you get professional communications consulting as part of the purchase? If not, how much will it cost?
- ☐ **3** Are all the parts and supplies you'll need readily available locally?
- ☐ **4** Who will train your people to use the equipment? Will they come back later and do it again if necessary?
- ☐ **5** Does the warranty cover everything or just a prescribed list of key components? How will a part not covered by the warranty be fixed? What is the cost?
- ☐ **6** What happens if your equipment doesn't perform as promised? Has your attorney checked your contract to see if terms of performance are really spelled out?
- ☐ **7** Is maintenance included in the total purchase price?
- ☐ **8** If maintenance isn't included, exactly how much will parts and labor cost?
- ☐ **9** If you should need repairs, what are the hours of your maintenance representative? Can you get emergency trouble service?
- ☐ **10** How long will it take a service man to get there and fix a minor telephone problem? A major system failure?
- ☐ **11** What kind of training has your maintenance representative had? Will his training continue?
- ☐ **12** Who will take care of "managing" your system—keeping communications records, coordinating rearrangement, removal or addition of phones?
- ☐ **13** How many visits or contacts have you had in the past year with Bell System communications consultants, traffic service advisors, repair personnel, or equipment installers who have deleted, added or changed equipment? Will you have this same requirement next year? How much will that service cost you?
- ☐ **14** What happens if you have a reduction in your communications needs? Are there penalties for removing equipment you're not using?
- ☐ **15** If you move your offices, who will move your communications system? Who will do the planning? What's the cost?
- ☐ **16** Who will pay to insure your new equipment?
- ☐ **17** Will there be personal property taxes due on your new equipment?
- ☐ **18** What could you earn on the money you'd spend to buy a communications system?
- ☐ **19** What do you know about the supplier you're dealing with? How long has he been in the communications business? Can he help you when you have a really tough problem that takes advanced technological know-how?
- ☐ **20** If your business burns down—who will pay to replace your system?

There's more to your telephone system
than meets the eye.



39-887 499

Our System

Bell's price includes:

☐ Repair and maintenance including parts

☐ Communications consulting

☐ Training for your people

☐ System replacement in case of disaster

☐ Custom system designing

PRICE

☐ 24-hour emergency repair service

☐ Regular preventive maintenance

☐ Trained, experienced craftsmen

☐ World's largest repair fleet

☐ Equipment guaranteed forever

MAINTENANCE

☐ Nearly 100 years of communications experience

☐ The standard of the industry

☐ Regulated for your protection

☐ Quality equipment supplied by Western Electric Co.

RELIABILITY

☐ Equipment designed for orderly growth

☐ You pay only for the service needed

☐ All equipment designed to be compatible with the nationwide telephone system

FLEXIBILITY

☐ Equipment compatible with new developments in the telephone industry

☐ Continued development by Bell Laboratories

☐ Improved technology to help keep costs low

OBSOLESCENCE

☐ When we provide your telephones, we own them; we take care of them

OWNERSHIP

Which sounds the best to you?

Their System

Does their price include:

- | | |
|---|---|
| <input type="checkbox"/> Repair labor cost after guarantee expires? | <input type="checkbox"/> Cost of money used to purchase system? |
| <input type="checkbox"/> Cost of replacement parts? | <input type="checkbox"/> Property and/or sales tax? |
| <input type="checkbox"/> Insurance protection? | <input type="checkbox"/> Communications consulting? |
| | <input type="checkbox"/> Continuing training for your people? |
-
- | | |
|---|---|
| <input type="checkbox"/> What hours are maintenance people available? | <input type="checkbox"/> Is there a scheduled maintenance program? |
| <input type="checkbox"/> How long will it take them to arrive? | <input type="checkbox"/> Are parts and equipment immediately available? |
| <input type="checkbox"/> Will you be charged for travel time? | <input type="checkbox"/> Do maintenance people have technical and engineering backup? |
-
- | | |
|---|--|
| <input type="checkbox"/> How long have they been selling telephone equipment? | <input type="checkbox"/> Are you protected against unreasonable service charges? |
| <input type="checkbox"/> If disaster strikes, how long will you be without service? | |
-
- | | |
|--|--|
| <input type="checkbox"/> What is required to add new features or change systems? | <input type="checkbox"/> If your business moves, can you move the system? |
| <input type="checkbox"/> Is capacity for growth provided? | <input type="checkbox"/> If your telephone requirements decrease, will your bill decrease? |
| <input type="checkbox"/> What will rearrangements cost? | |
-
- | | |
|---|--|
| <input type="checkbox"/> Can this system be easily adapted to technological improvements in the telephone industry? | <input type="checkbox"/> Will the system you buy today meet the needs of your business tomorrow? |
|---|--|
-
- | | |
|---|--|
| <input type="checkbox"/> When you buy your telephones, you own them; you take care of them. | |
|---|--|
-



**Telephones and equipment are half:
people and service are the other half.
You need both to make a communications system work.**

Over one million men and women of the Bell System all have one basic responsibility: To serve you, our customer, and to make sure your telephones work every time you need them. The Bell System team of specialists includes skilled service people, engineers, operators, construction crews and

administrators.

These folks aren't "just passing through." In most cases, the people you deal with are residents of your community—your neighbors. And they'll be right there tomorrow should you need them.

Your Pacific Northwest Bell Communications Consultant is your link with the Bell System.

He's one member of the nationwide total communications team.

For information regarding any part of your business communications system, call your local Pacific Northwest Bell business office. You'll find the number listed in the Call Guide section of your telephone book.



Pacific Northwest Bell

<u>CONTINUING TELEPHONE CHARGES</u>		No.	I C
1	Central Office Lines @ 32.60	326.20	245.00
1	Interconnect Devices @ 6.50	45.50	140.00
1	Charges for Telephone @ 2.00	14.00	—
1	Recorder Coupler	3.75	—
1	Residence Listing	.50	—
1.2	Additional Listings	12.00	—
	Circulated Advertising	29.00	—
	Public Address Directory	7.50	—
		<u>\$346.45</u>	<u>\$385.00</u>

CHIEF CHARGES

Personal Property tax for your area is \$29.33 per thousand dollars of value.

First year pay tax on 90% of purchase price.

Subsequent years depreciate tax by 5%.

Minimum tax is 20-25% of purchase price.

INSURANCE Rates Range between 70 to 77 per thousand dollars of value. It must constantly be increased to cover replacement costs. Your system value depreciates but the cost of replacement appreciates.

THE ECONOMICS OF YOUR TELEPHONE SYSTEM



Pacific Northwest Bell

FOREWARD

This publication is designed to assist you in making a comparison of purchase or lease purchase of communications equipment versus obtaining communications services from the Telephone Company.

We would of course prefer that you subscribe to service from us to realize and maintain the benefits of the total system concept and single point of contact. However, if your company's decision is to purchase your own communications equipment this publication will prove invaluable in familiarizing you with the various economic factors you must consider. Also, we can and will assist you in making the economic comparisons of various vendor proposals at no cost or obligation.

ECONOMIC ANALYSIS**CONTENTS**

— Types of Vendor Contracts

- Outright Purchase
- Installment Purchase
- Operating Lease
- Financial Lease
- Conditional Sales Contract

— Economic Considerations

- Cost of Apparatus
- Cost of Installation
- Cost of Growth
- Moves and Changes
- Purchase of TELCO Cable
- Equipment Room
- Taxes
- TELCO Trunks and Interfaces
- Insurance
- Administrative "Overheads"
- Maintenance
- Depreciation
- Income Taxes

— Economic Comparison

- Cost Comparison
- Basic Data
- Rate of Return
- Reinvested Method — Future Worth
- Discounted Method — Present Worth

TYPES OF VENDOR CONTRACTS

Today, communication equipment and systems can be obtained from a number of vendors. The equipment is offered on the following basis:

- Outright Purchase
- Installment Purchase
- Operating Lease
- Financial Lease
- Conditional Sales Contract

The manner in which an economic comparison can be made will depend upon which type of contract was offered by the vendor. The "straight" purchase agreements are readily identified; however, the difference between a financial lease and an operating lease may be more difficult to determine.

How you intend to treat the equipment expense on your company's books will determine the type of lease. If you intend to depreciate the equipment starting at year one, you assume ownership immediately and the contract is determined to be a conditional sales contract (financial lease). If you carry the lease payments as operating expenses, the lease is an operating lease similar to the basis upon which the Telephone Company offers equipment.

The following legally structured definitions of contract terms are offered for your reference.

Outright Purchase implies immediate payments as defined within the terms of a contract. This may be within 30 days or 90 days, etc., on delivery or after installation. The buyer assumes ownership at the onset of the contract.

Installment Purchase implies payment over a period of time and in the amounts as defined within the terms of a contract. This may or may not include installation. The buyer assumes ownership at the onset of the contract.

Financial Lease is defined as a contract under which a lessee agrees to make a series of payments to a lessor which, in total, exceeds the purchase price of the equipment acquired. Typically, payments under a financial lease are spread over a period of time equal to the major portion of the useful life of the equipment. During the initial terms of the lease, the contract is non-cancelable by either party, i.e., the lessee is irrevocably committed to continue leasing the equipment. For ownership, see (1) following.

Operating Leases may be defined as all other leasing arrangements, and, typically, are cancelable by the lessee upon giving due notice to the lessor. Operating leases do not involve any fixed future commitment by the lessee except terminating costs and, in this respect, are similar to most business expenditures. The lessee does not assume the responsibility of ownership.

Conditional Sales Contract includes installment purchases and financial leases. The buyer assumes ownership with an installment purchase and when (1) following applies:

- (1). In 1955 the Internal Revenue Service established guidelines for determining whether an agreement is a lease or a conditional sales contract. Among other things, this ruling (Revenue Ruling 55-540) stated that, unless there are "compelling persuasive factors of contrary implication," an agreement is a purchase and sale, for tax purposes, rather than a lease or rental if:
 1. The lessee will acquire title upon the payment of a stated amount of "rentals" which under the contract he is **required** to make.
 2. The property may be acquired under a purchase option at a price which is nominal in relation to the value of the property at the time when the option may be exercised, as determined at the time of entering into the original agreement, or which is a relatively small amount when compared with the total payments which are required to be made.

Under this ruling, if the lease agreement is ruled to be a conditional sales contract, the lessee would not be permitted to deduct his lease payments, but would be able to deduct only the amount of allowable depreciation and interest expense for each year.

NOTE

Equipment manufacturers are finding the financial lease to be an important selling tool. These companies may or may not collect a fee, i.e., interest, over and above their direct costs of the transaction and their normal manufacturing profit. But auxiliary operating costs such as maintenance, local sales taxes and insurance premiums and financing costs such as legal fees and administrative costs are often transferred to the lessee in a lease agreement.

ECONOMIC CONSIDERATIONS

COST OF APPARATUS

This is the **total cost** of buying the equipment. It should include all the associated pieces, parts and/or accessories that make up that total product. A good analogy can be made between buying a new car and a communications system. The advertised price of the car includes only the basic components or standard equipment. When heavy duty shocks, radio, quality tires, etc., are added, the sale price goes up. The same is true with a communications system. You should be positive that the quoted price is the total cost of the system. Any shipping or handling charges will also affect the total cost of the apparatus and must be considered.

COST OF INSTALLATION

Installation can be estimated by taking 50% of the cost of switching equipment, console (or switchboard) and power equipment. Fifty percent is only an estimate; it may be more or less, but should be in the range of 35 to 60%. It is dependent upon all factors involved in getting a system installed and working. You should consider:

- Cost of removing old equipment
- Cost of remodeling and construction
- Cost of installing cable
- Cost of additional conduit (if required)

COST OF GROWTH

Very few systems are ever installed and then forgotten. All businesses plan to grow and with them the communications system must also grow. This will represent future costs to your company. You should know how they will occur and what they will be.

This is particularly important in competitive cases since it will often give a truer picture of competitive prices. For example, a private supplier will often install only enough cable to handle the system at "cut". Any future growth would force the private supplier to install new cable, the cost of which would be passed on to you. Some private suppliers in attempting to make a foothold are willing to sell loss-leaders; however, they are not willing to continue the low price on future growth. You may find that the growth will exceed the private system's trunk or station capacity. Some of the costs of future growth are:

- Cost of additional non-button telephones
- Cost of additional multi-button telephones
- Cost of apparatus to operate button telephones
- Cost of additional cable
- Cost of additional capacity
- Cost of trunks, tie-lines, WATS, etc.

MOVES AND CHANGES

Once a system is installed, it does not normally remain static. There are almost constant changes occurring of one type or another, such as changes of location, terminal rearrangement, feature changes, etc. The larger the system, the more of these changes you can expect. You should be aware of the probable future costs for the changes:

- Move non-button telephones
- Move multi-button telephones
- Rearrange multi-button telephones

PRINCIPAL AND INTEREST

The purchasing of a private system which involves payments to be made over a period of time (Installment Purchase or Conditional Sales Contract) will include interest or carrying charges. When doing a financial analysis, it is necessary to separate these interest charges from the principle payment. Interest payments are operating expenses and as such are tax deductible. Principal payments, however, are capital expenditures and are not deductible as current expenses. Instead, they are deductible in the form of depreciation over the life of the asset.

The **total** amount of interest to be paid over the payment period is simple to determine. However, the amount of interest **per payment** is more difficult and time-consuming to determine.

Let's work on this principle and interest problem for a moment. First we need a private proposal — and the following is pretty typical:

"We propose to supply and install, complete, the equipment and cable listed in schedule (1) for the sum of one hundred forty thousand dollars and zero cents (\$140,000.00) with payment to be made at the following options:

An outright cash payment of the full amount or:

120 monthly payments of \$1,817.90 with the first and last months paid in advance."

Let's work out the principle and interest costs.

120 monthly payments of \$1,817.90	\$ 218,148
The purchase price was	140,000
The difference is interest	\$ 78,148

We now know that interest alone was \$78,148.00. However, it did not occur uniformly over the years. Since interest is charged on the unpaid balance, the interest is high in the early years and lower in the later years. The actual accrual of interest charges on a year-by-year basis would be determined as follows:

Year	Principle	Interest	Principle Balance	Interest To Date
0			\$140,000.00	
1	\$ 9,214.81	\$12,600.00	130,785.19	\$12,600.00
2	10,044.15	11,770.67	120,741.04	24,370.67
3	10,948.12	10,866.69	109,792.92	35,237.36
4	11,933.45	9,881.36	97,859.47	45,118.72
5	13,007.46	8,807.35	84,852.01	53,926.07
6	14,178.13	7,636.68	70,673.88	61,562.75
7	15,454.16	6,360.65	55,219.72	67,923.40
8	16,845.04	4,969.77	38,374.68	72,893.17
9	18,361.09	3,453.72	20,013.59	76,346.89
10	20,013.59	1,801.22	.00	78,148.11

As you can see, the procedure is time consuming.

When the above method cannot be utilized, it is a simple procedure to determine the **average** interest on a yearly basis. Take the total interest paid and divide by the number of years

$$\frac{\$7,814.81}{10 / \$78,148.11} \quad \text{or } 5.58\% \text{ per year simple.}$$

However, the effective interest rate was 9% on the declining balance.

Therefore the average annual interest is \$7,814.81. Your final total when you do your cash flow analysis will be off significantly when using the average method instead of the true method. It can make a significant difference if the final comparison between systems is very close.

PURCHASE OF TELCO CABLE

In those cases where a private system is to replace a TELCO system you may wish to buy the TELCO cable rather than install your own. Such cases, of course, will be negotiated on an individual basis. However, as a general rule, if we did sell the internal cables the price would probably be no higher than if the wiring were purchased and installed by an outside contractor

EQUIPMENT ROOM

A favorite selling point made by vendors; especially with hotel/motel customers, is the small amount of space needed for their equipment. This is especially true when our recommendation involves the use of step-by-step gear necessitating an equipment room. Equipment room space is indeed a valid argument. Until we introduced our cabinetized and modular systems, we were often on the losing end.

To determine exactly how much difference there is and what this difference is worth is not a difficult procedure. It should be done in every case where it may become important in influencing your decision.

If an equipment room is required, determine the space needed by TELCO equipment and from it subtract the space needed by the competitive gear plus the space needed by any TELCO gear such as interface units or terminal blocks.

Most competitive switching equipment is similar in form to our cabinetized and modular crossbar systems. The number of lines and trunks usually determine the number of cabinets. If auxiliary battery supply is used, this usually takes another cabinet or even a separate room. If key equipment is used with the private system, it will take extra cabinets similar to TELCO's.

Remember also that a cabinet sitting in a hallway or office area must have dedicated work space around it which increases the effective space it requires. Each private system is slightly different in space requirements so you will need to work up figures on an individual basis.

Hotels may claim our equipment room takes away an income producing room. Nearly all architects, when designing hotels, allow for adequate equipment room space. This space is usually deemed undesirable space and is located near elevators, machinery, air-conditioning equipment, etc., where noise would be objectionable to guests.

No hotel has every room full every night. The occupancy rate runs from 50-90% with a nationwide average running about 65%. In addition, a room to be made rentable takes an initial cost of from \$2,000.00 to \$3,000.00. This same expenditure must be made again every 5 to 6 years to repair and redecorate this room. Above this initial cost is the operating expense for the room. This is the cost of maids, cleaning, electricity, heat, etc., to keep the room in a rentable condition and expenses incurred to rent it. The national average for this expense runs 28% of income for summertime and 30% of income for wintertime. In other words, for every dollar gained (before taxes), 28 to 30 is spent to gain it.

Let's see how this works out.

Average Room Rent	\$ 15.00
Number days per month	<u>x30</u>
	\$450.00

The claim is that our use of an equipment room is costing \$450.00 per month.

In actuality:

Average Room Rent	\$ 15.00	
Average Occupancy (65% x 30)	<u>x20</u>	days (19.5 rounded off)
Average Monthly Income	\$300.00	

Expenses:

Operating Expense	\$84.00	(28% of \$300.00)
Pro-rated Room Replacement	\$33.00	(\$2,000 ÷ 5 years)
Effective Floor Space of private system	\$42.00*	
Total Expenses		<u>\$159.00</u>
Income Before Taxes		\$141.00
Income Taxes		70.50 (at 50% rate)
Income After Taxes		<u>\$ 70.50</u>

So you can see, the claim of a loss of \$450.00 per month actually amounts to only \$70.50.

TAXES

The subject of taxes and how they apply to your business is by its very nature complex. Tax advice should come from your professional counsel. The following items are illustrative of some of the tax considerations which should be reviewed.

State Sales Tax (where applicable)

This tax presently ranges from 5% to 5 1/2% (depending on the location of the sale or purchase) and is applicable to items of **purchased** telephone equipment and some **leases**. Does the sale or lease price quoted by the vendor include the sales tax and at a current rate? If a maintenance contract is involved, is there a tax for that particular type of agreement?

Federal Excise Tax & City Tax (where applicable)

These taxes are applicable to certain TELCO charges. Since these taxes may or may not apply to the items being compared, you should obtain the specifics from your local TELCO representative.

Investment Tax Credit

Presently, if a customer obtains non-Bell communications equipment, and such equipment qualifies for the investment tax credit, he is eligible for a maximum 4% credit on his federal income taxes. This means that if the equipment costs \$30,000 the customer could deduct \$1,200 from his federal income tax. In this case, the investment tax credit must be applied to the non-Bell costs to make a fair comparison. In order for you to take advantage of the tax credit, the non-Bell vendor must supply the purchaser or the lessee with a certificate which stipulates that the credit is to be passed to the customer and will not be taken by the supplier.

*computed as follows:

Private System (200 lines)	60	sq. ft.
	70	per sq. ft.
	<u>\$42.00</u>	

PERSONAL PROPERTY TAX

This tax is computed at "X" number of dollars per \$100.00 of assessed valuation. The assessment rate and the assessed valuation will vary from year to year. It is best to determine an **average** assessment and property tax and use it as a constant expense throughout the life of the equipment. Remember, personal property tax never reaches zero as long as the equipment remains in service.

TELCO CHARGES

Even privately owned systems must utilize **TELCO** trunks and interfaces. Interfaces are devices designed to protect the telephone network our customers share from such items as power surges, incompatible signals or transmissions, degradation of services and protection against hazardous voltages or equipment that could adversely affect your service and that of others. The charges for trunks and interfaces vary and may or may not be mentioned by a private supplier in his price quote.

INSURANCE

Insurance may be obtained two ways: Either as a separate policy or as an add-on item in an existing policy. The add-on method is usually less costly. Even companies claiming to be "self-insured" recognize the need for protection against possible loss and usually maintain a "loss allowance" which has accounting value.

The cost of insurance is determined by many variables such as building construction, location, city fire code ratings and type of business. A "rule of thumb" rate is \$7.50 per year per \$1,000.00 of replacement value on a separate policy. Adding on to an existing policy is about \$3.50 per year per \$1,000.00 of replacement value. Some vendors require you to obtain insurance coverage in their name which might affect your insurance costs. Some vendors provide insurance as a part of the package. You will want to look closely at exactly what it covers, under what conditions, etc...

ADMINISTRATIVE "OVERHEADS"

Administrative costs are general costs which usually are difficult to isolate in relationship to a specific phase of a business operation, e.g., a communications system. However, they are real and do add to the total overall costs. Successful administrators recognize that every investment made by their company must carry its share of the overhead costs. One method used is to accumulate the overhead and prorate it as a ratio applied to the investment of the new communications system.

Administrative "Overheads" consists of:

- Supervision of labor
- Personnel and other records for labor
- Purchase and inventory handling of spare parts, replacements, test equipment, etc.
- Heat, light, etc., for maintenance
- Bookkeeping records of the system.

MAINTENANCE

Maintenance is a real (tangible) cost of ownership. Fixing realistic annual maintenance charges for a proposed communications system is probably one of the most challenging aspects of obtaining your own system.

Maintaining a communications system, particularly where switching equipment is involved, is no simple task. The degree of effectiveness and consequent cost centers in the reliability obtained from the service.

Some factors are:

1. Quality of manufacture:
(Is it a heavy-duty system constructed to give trouble free service for years . . . or . . . is it a light-duty apparatus?)
2. Quality of Installations:
(Will it be installed properly?)
(Will cabling be concealed?)
3. Experience and skill of maintenance personnel:
(How well are they trained and supervised?)
(Location of maintenance personnel, travel time involved and cost of each call.)
4. Quality of Tools and Test Equipment:
(Are these available in the **quantity** needed at the **time** needed?)
5. Quality and availability of maintenance area:
(Will it be sufficient in size and design to permit a good work atmosphere?)
6. Flexibility of Design:
(Will the system permit adaptations for future moderizing and/or changes?)
7. Availability of replacement parts.
8. Availability of maintenance personnel.

All of these items will directly relate to the quality of service rendered.

If you should decide to perform your own maintenance, then you must consider:

1. Labor — includes social security and all other benefit costs, i.e., the loaded hourly figure.
2. Materials and supplies, i.e., wire fuses, relays, etc.
3. Replacement parts, i.e., switches, cords, batteries, telephone sets, panels, etc.
4. Maintenance center and storage area.
5. Tools and test equipment.
6. Transportation — if required.

The annual cost of these items over the life of the system varies from year to year and from early in the life of the equipment to later in that life. During the time immediately following installation maintenance costs may be high since complex equipment often requires adjustment. Maintenance expense during the following early years should be relatively low, since equipment performance can be expected to be optimal. Subsequently, however, equipment begins to wear out, and maintenance costs will escalate.

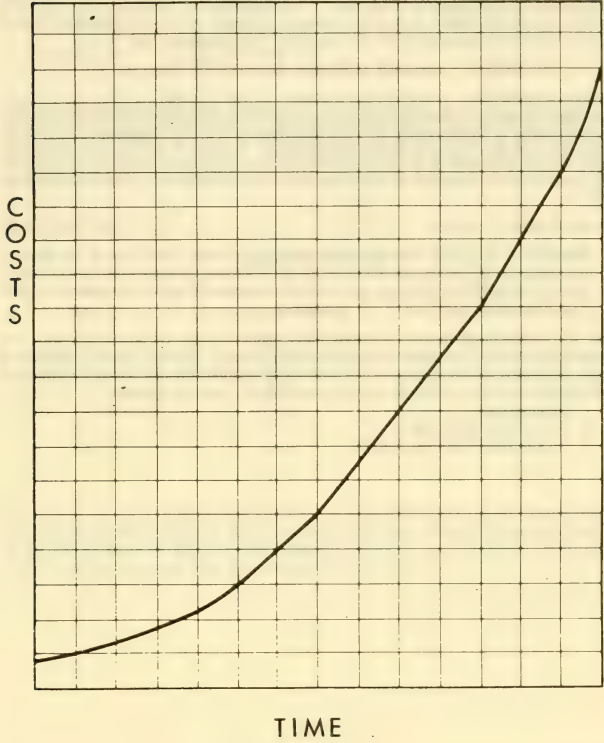
A typical maintenance costs curve might look like the exhibit on the opposite page.

There are several significant facts revealed by charting the maintenance over the total life of a system. Perhaps the most important is that it shows that costs increase with time.

Many equipment manufacturers and sellers of competitive equipment offer maintenance contracts. These contracts apparently are attractive to the buyer. They tend to only show the cost of maintenance for the first year or two that a system is in service, and are often subject to upward revision as the years go by. It's doubtful that any equipment supplier would give a maintenance contract over the expected life of the equipment at a constant rate, as experience has shown that maintenance expense climbs rapidly after the 5th year. If the contract includes maintenance, this additional cost would not be included at least for the years that maintenance is included. After that, it would likely be more than 13% of the purchase price depending on how well it was maintained under the contract. Some maintenance agreements contain a number of situations which are not covered. These should be given serious consideration.

GENERAL MAINTENANCE CURVE

CROSSBAR EQUIPMENT



DEPRECIATION

Everything purchased to perform a physical function, (except land), wears out or becomes obsolete. It has to be replaced . . . The Federal Government permits a business operation compensation for replacements in the form of a tax concession. This concession permits a reduction in annual Federal Income tax payments equivalent to the predetermined annual amounts needed for replacement at the end of the item's expected life . . .

. . . This then becomes a **non-cash accounting** allocation that works this way:

A manufacturing firm buys a fork-lift truck at \$3,000. It is estimated that the life of this truck is 5 years. Using straight line depreciation, 1/5 of the cost can be deducted on the firm's income tax report each year for the **life** of the truck, the 1/5 (or \$600) is posted as an **expense** on the firm's books. This may be shown as "depreciation reserve." Whether or not the firm chooses to actually set the \$600 aside in a reserve is immaterial and highly improbable. In any event, the \$600 is subtracted from revenues and does not appear in income figures to which income taxes apply.

The key to keep in mind is:

Depreciation is nothing more than an accounting allocation of the cost of any piece of equipment to the time periods during which the equipment is used. Even though cash is laid out to purchase an asset, the tax deductible expense allowed by the Government must be spread over the lifetime of the equipment.

There are several basic methods of depreciation available under the present tax laws. The method used will affect the outcome of any lease-buy decision. Thus, the method used must be known. In order to illustrate some of the differences between straight line and accelerated depreciation, we will describe the following methods for example purposes:

1. Straight line.
2. Sum of the Year's Digits.*
3. Double Rate Declining Balance.*

*Considered "Accelerated" methods.

Straight Line

We just had a simple illustration of this method in the fork-lift truck example. Remember that Straight Line Depreciation is nothing more than taking the total cost of the asset minus any salvage value and dividing it by the total useful life in years.

$$\text{Annual Depreciation} = \frac{\text{Original cost} - \text{salvage}}{\text{Expected Useful Life}}$$

The next two types were originally allowed by the Government in 1954 for tax purposes to stimulate investment by businesses. These methods allow a more rapid write-off of the asset. They allow larger depreciation expenses in the first few years of the asset's life, offset by smaller depreciation deductions in the last few years. The first of these accelerated methods is called Sum of the Year's Digits method.

Sum of the Year's**Example — \$3,000 Car**

Year	Depreciation Allowed	Assume \$3,000 Car
1	5/15	1,000
2	4/15	800
3	3/15	600
4	2/15	400
5	1/15	200
<hr/>	<hr/>	<hr/>
15	15/15	3,000

The Sum of the Year's Digits method works by first totaling the sum of all the numbers making up the expected life of the asset, thus a 5-year asset as shown in this example would have the sum $1+2+3+4+5=15$. The depreciation allowed in the first year is then $5/15$ of the original cost, in the second year, $4/15$, etc., and the last year $1/15$.

Double Rate Declining Balance**Example — \$3,000 Car**

Beginning of Year		Double Rate Declining Balance		End of Year
Year	Book Value	Depreciation %	Depr.	Book Value
1	3,000	40%	1,200	1,800
2	1,800	40%	720	1,080
3	1,080	40%	432	648
4	648	1/2	324	324
5	324	1/2	324	0

Under this method, each year's depreciation is figured by taking double the straight line allowable rate of the declining book value of the asset. Thus, with a 5-year life for the \$3,000 car the straight line depreciation rate allowed is 1/5 or 20% per year. But under double rate declining balance we would double the straight line rate and be allowed to deduct 40% of the declining balance.

Note that in the 4th year we switched from the declining rate method to the straight line method. This is done because, if you continue to take 40% from the declining balance, you will never get to 0, and all depreciation methods must end at 0 or salvage value. The general rule for this switch is that we change to the straight line rate whenever the straight line depreciation becomes greater than the double rate declining balance. Thus, in this example, in the 4th year, with 2 years to go, the straight line depreciation is 50% of \$648 or \$324, whereas the double rate depreciation would have been 40% of \$648 or only \$259.

Accelerated depreciation is the most widely used for tax purposes. It provides the fastest possible write-off allowed by law.

The advantages of this more rapid write-off is the time value of money. By taking larger depreciation allowances, less income tax is paid today. This is offset by having to pay higher taxes in future years when lower depreciation expenses apply. However, in the meantime, the cash that is not paid out in taxes today can be reinvested in the business at the current rate of return. In addition, the taxes can be paid in the future with cheaper dollars, assuming there is a continuing inflationary trend. Both of these factors will tend to make ownership using accelerated depreciation more attractive when compared to straight line depreciation.

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FEDERAL INCOME TAXES

As a general rule, a **corporation** pays \$5,500 plus 40% of all taxable income over the first \$25,000 annually. It is usually acceptable to use a 50% factor when estimating, e.g., \$100,000 income after expenses x 50% tax = \$50,000 tax.

If the firm is a partnership, the income tax rate will vary with each individual partner. It will probably be impossible to determine the average of all the partners or for that matter, even one of the partners. It is acceptable to use a rate of 30% since this would put an average partner in the \$25,000 — \$30,000 income bracket.

We are interested in knowing a customer's income tax rate because our financial comparisons are made on both an "after tax" and a "pre-tax" basis.

If a customer is in a 50% income bracket, this in essence means that for every dollar of telephone operating expense he incurs, he will "get back" 50% of that expense in income tax savings. In the same manner, if a customer is in a 30% income tax bracket, he will "get back" 30% in income tax savings.

COST COMPARISON

Businessmen are constantly searching for ways to decrease their operating costs and thereby increase their profit margin. Vendors sometimes use this basic business desire for "cost-cutting" in their proposals. They may offer a superficial comparison of costs between their proposal and ours.

The purpose of this section is to acquaint you with ways we can help you arrive at a more exact cost comparison. You owe it to yourself and your company to do an in-dept study of telephone equipment costs. By the use of a computer, and with some items of basic data, we can make an economic comparison.

BASIC DATA

We must determine certain facts before starting the analysis. **Do not use arbitrary figures.** If the basic facts are open to question the analysis and proposal will lack validity.

The following is a list of the data needed for a complete economic analysis and comparison:

- Purchase price (if purchased)
- Installed value (if leased)
- Salvage value (at end of expected life of the equipment)
- Installation costs (competitor's)
- Installation costs (TELCO)
- Installation costs (interconnection devices)
- Expected equipment life
- Growth projections
- Cost of capital
- Maintenance costs for the life of equipment
- Moves and change charges
- Recurring Interconnection Charges
- TELCO monthly charge

- Insurance costs
- Your rate of return
- Approximate income tax bracket (usually 50% to 53% if you are a corporation)
- Property tax rate
- Method of depreciation
- Competitor's lease payments
- Investment tax credit
- Competitor's one-time charge (down payment)
- Sales tax rate
- Buy-out charge
- Growth costs
- When will the system be outgrown

RATE OF RETURN

Every business expects a return (profit) on its capital investments. This includes the purchase of telephone equipment.

The mathematical process for determining the rate-of-return on the purchase of telephone equipment is not difficult, but it is tedious. The process involves interpolation and trial-and-error.

This paper will not detail the process. However, you should understand that it involves comparing the annual "savings" or "losses" with the net initial purchase cost for the equipment. This comparison will establish a rate-of-return percentage for the purchased equipment, which you may then relate to your company's normal profit percentage.

REINVESTMENT METHOD — Future Worth

This is the worth of the difference between a TELCO and private system if it was invested at the year the saving occurred and was left to compound until the end of the life of the equipment, i.e., if during year 1, the TELCO equipment showed a savings over the private supplier, this means your company has that much extra money to use as they wish — they may put it in a savings account or savings certificate at 5 1/2% interest. More than likely it would be put right back into the business at a much higher rate-of-return, perhaps 12% — 20%.

The worth of the invested money is determined by using your company's average rate-of-return on invested capital. If this rate-of-return is not known, use 8%. This would almost be a minimum necessary to maintain the business.

DISCOUNTED METHOD — Present Worth

Another method for determining a true cost comparison utilizing the time value of money is to determine the "present worth" of the differences under each year.

This computation says in essence, "If I were to set aside enough money today to equal these differences when they occur, what amount must this be assuming my money will earn interest at the rate of 'X'%"

EXAMPLE: I need \$108 twelve months from now. If I put \$100 in the bank today at 8% interest. I will have my \$108 when I need it.

The discounted amount is determined by using the average rate of return on invested capital. Again, if not known, 8% is a reasonable figure.

CONCLUSION

The methods whereby you may obtain communications equipment and services are varied and the types of maintenance arrangements are several. Your TELCO representative is available and at your service to compare fairly the services and the financial methods offered by the non-Bell vendors against those of the Telephone Company. In addition, he will analyze your business needs from a communications standpoint and recommend the system which most closely fulfills those needs. Your wants won't be overlooked either.

We have been in the communications business for over 80 years. Recently we developed and are offering several new communications systems and will continue to develop new ones in the future. We are going to be around for a long while and will continue to provide the best possible service for many, many years to come.

SELECTRON, INC.,
Portland, Ore., December 6, 1973

GERALD HELLERMAN,
Senate Subcommittee on Antitrust and Monopoly
Washington, D.C.

DEAR MR. HELLERMAN: On approximately November 1, 1973, one of our servicemen reported he heard, from a Bell serviceman, that Pacific Northwest Bell and Western Electric were inventorying approximately one to one and a half years supply of cable needed to install interconnect telephone systems. Selection checked with two of its suppliers to see if there was shortage of raw material for manufacturing cable.

North Electric Supply Company told us that the Bell system had gone outside of Western Electric and are purchasing cable privately. North Electric Supply reported that they did not expect to be out of cable but that deliveries may be slow and the price of cable may increase because of the shortage.

The amount of cable Bell is purchasing, or the purpose is unknown to me. I am very skeptical of the Bell systems purpose because of the following conditions:

1. AT&T, Board Chairman, Mr. John D. deButts, expressed his feelings about "interconnect" and asked for a "moratorium on interconnect" in his speech of September 20, 1973 before the NARUC annual convention in Seattle, Washington.

2. The Bell system, with all its resources, could effectively stifle interconnect by purchasing huge inventories of cable, which is required to install private telephone systems.

3. Creating a shortage of cable material will not only increase the cost of private interconnect systems but drive small interconnect business', who are economically denied the ability to stock sufficient amounts of cable inventory, out of business.

4. This new Bell system policy is also occurring at a conspicuous time when Bell system is filing tariffs for their new equipment called the Com Key Model 718 and 1434.

The Com Key tariffs are being offered at rate structures which deviate from past Bell system tariffs. Creating a cable shortage will effectively permit the Bell system to introduce their new equipment under a *contract* period of three, five or eight years.

The end result will permit Bell to introduce their new equipment and isolate potential private customers from the market place by long term contracts.

5. One must question the rate structure of the new Com Key offerings for the following reasons:

A. The rates appear to be lower than those a private supplier can effectively compete with, which makes one suspicious of cross subsidization.

B. The introduction of two tier pricing structure. The first pricing tier for the equipment over a fixed period of time and the second pricing tier to cover maintenance.

The subscriber will only have to pay the second tier after the expiration of the first tier pricing.

C. The Com Key system is an introduction of equipment which provides loud speaking feature. This appears to be a violation of the consent decree of 1956.

The new practice of inventorying long term cable supply, by the Bell system, demands an investigation by the Senate Subcommittee on Antitrust and Monopoly.

Sincerely,

RAY STEVENS.

SELECTRON, INC.,
Portland, Ore., November 16, 1972.

EDWIN B. SPIEVACK,
Washington, D.C.

DEAR MR. SPIEVACK: Attached is correspondence we received from Pacific Northwest Bell regarding charges for giving us an estimated price of existing cable plant.

The rate they are charging is reflected in our personal notes up in the left hand corner of the correspondence. It is \$16.65 per hour for the time of plant, area engineering, and Seattle final check.

There are three things I question:

1. Justification of charging \$16.65 per hour when they only charge customers \$14.00 for overtime rates on equipment.
2. Substantial delays in getting prices back from them which has a tendency to "cool" prospects in a competitive situation.
3. Their ability to even charge in a competitive market. I realize they do not have to sell and that cost is incurred in preparing their cash selling price. However, I think it is contrary in the competitive market to charge people for this type of service. As an example, have you ever heard of IBM or Xerox charging people for estimates of systems they will sell?

Approximately 1½ years ago the prices for their cable plant were excessively high. I had actual quotations on several jobs on plant cable which I felt were excessive. I took this correspondence to the PUC and discussed it personally with them.

My point was that PNB was incurring additional charges for the removal of their cable plant where I would be willing to buy the existing cable plant if the charges were reasonable. As a result of my contact, all cable plants are now approved by the PUC. These systems are installed on existing cable plant prior to the PUC's approval which is merely a formality. The end result is the cable plants are now more reasonably priced.

Sincerely,

RAY STEVENS.

Enclosure 1.

PACIFIC NORTHWEST BELL,
MARKETING DEPARTMENT,
Portland, Ore.

\$16.65 per hour for time of:

- (1) Plant.
- (2) Area engineering.
- (3) Seattle office that checks final bid.

SELECTRON, INC.,
Portland, Ore.

GENTLEMEN: This is to inform you that effective May 15, 1972, PNB will begin charging for price quotations for the sale of inside wiring and cable.

When we receive a request for survey of inside wiring we will estimate the cost for making the appraisal and submit these costs to the party making the request. If the party wishes PNB to conduct the study we will then require a letter authorizing us to proceed and concurring that they will accept and pay the actual costs for completing the survey.

PNB has designated an individual in each operating area as coordinator to process requests for surveys for the sale of inside wiring. All such requests for price quotations in the Oregon Area should be directed to:

R. D. (Dick) Rice, 421 Southwest Oak, Room 102, Portland, Ore., 503-226-8155

All such requests in the Washington-Idaho Area should be directed to:

A. T. (Terry) Scott, 1915 Terry Avenue, Room 714, Seattle, Wash., 206-345-5285

The charge for the inventory and appraisal will not be deducted from the quoted selling price should the sale be consummated. If any other authorized party requests such an inventory and appraisal, a charge will be made to that party.

We would like to emphasize that the policy and procedure outlined above is intended to provide you with faster service, while also compensating PNB for its required work in answering these requests.

Sincerely,

R. D. RICE.
Marketing Staff Supervisor.

[Memorandum]

April 25, 1974.

To: Ralph Sumers.

From: Lloyd D. Bailey.

Subject: Devices used by Mountain Bell to protect equipment from foreign voltages.

I was employed with Mountain Bell from November 3, 1953 until April 6, 1973. All of this time was spent working in their plant department. For about

one year in the early 1960's I was assigned to the Palisade, Colorado area. I and one other man were responsible for the entire operation and maintenance of four small central offices and approximately 1000 square miles of outside plant. In each of these offices and in every central office I have been in, the office was equipped with heat coils. The heat coils are placed in series with the central office wiring and the cable pairs that carry the telephone numbers and or circuits to houses and or businesses. These coils are designed to open the line in the event of lightning storms or other foreign voltages such as caused by power lines falling across telephone wires. The Telephone Company has provided this equipment to protect their telephone network and the central office equipment. Since this protection was provided before interconnect existed, I see no real purpose to an interface device other than to give protection to customer owned equipment from telephone company employees putting out over 200 volts from the test board or 600 volts that a cableman uses when trying to locate a wet spot in a cable.

While at the telephone company, I had occasion to install several CDH interconnect cabinets. I received no training at all, but was given a few schematics, and received a connection and option chart. A man from Communications Consultants showed me how to test my equipment.

I installed PBX's for the telephone company for 5½ years. About October of 1972 I installed an ITT 400A PBX. Each central office line that I put into the PBX was a two wire circuit from the central office and connected directly into the PBX. Just before going into the PBX the wires had "carbons"¹ to protect the PBX from lightning or other voltages. To the best of my knowledge there has been little or no trouble with the PBX since it was installed.

Presently I am in charge of installing an ITT 400G PBX, which is an improved 400A. We will have an interface between our equipment and the central office. This requires us to in effect change a two wire circuit into a ten wire circuit. The ten wires will connect directly into the PBX. In order to handle a ten wire input the trunk units have to be specially modified.

The interfaces can provide some protection to the customer equipment but since the bell system has already provided protection to their network via the use of heat coils the other reasons they would have for wanting the interconnect device is that the test boardman would read a short from the coil of the interface. Without the interface they would read a negative voltage such as the -24V from a Western Electric 800A, -36V from the ITT 400 type PBX which they also install. On a key system or an electro-mechanical PBX they would read various capacities which they do now on their own equipment.

LLOYD D. BAILEY,
Installation Supervisor.

[Memorandum]

April 18, 1974.

To: Ralph Sumers.
From: Lloyd Bailey.
Subject: Post Chrysler Plymouth.

Several years ago while I was still working for the Telephone Company, I as a PBX installer was assigned to install an interface CDH cabinet for Communications Consultants Inc., at Post Chrysler Plymouth Company. The job located on South Havana Street in Aurora, Colorado.

On this job the new PBX was located in the main building and C.C.I. had to install some equipment in a building located approximately 150' away from the main building. The Telephone Company had a cable in the conduit. CCI asked if they could use the Telephone Company's cable to pull their cable in with after the cut over. Again the answer was no. The Telephone Company's cable foreman was calling the shots. As the Telephone cable men were pulling their cable out of the conduit, they cut into four foot lengths. CCI finally had to run their cable through the air instead of through the conduit.

LLOYD D. BAILEY,
Installation Supervisor.

¹ Carbons are devised so that in the event of lightning or high power surges the line will be short circuited to ground so that the customers equipment will receive less of the foreign energy. The "carbons" are placed at all telephone company residences and business installations.

September 20, 1973.

DANIEL SPARR, WHITE & STEELE,
American National Bank Building,
Denver, Colo.

DEAR MR. SPARR: We appreciate the opportunity to present this proposal to you for a telecommunications system at your new location.

Our cost comparison includes rates for our COM KEY 1434 key system. The tariff on this telephone system has not yet been approved in Colorado. Therefore, we have quoted our rates quite liberally. The monthly rate for our system is quoted as \$400 and excludes the business line charges. We feel the cost for twenty sets equipped with the optional features could very likely be lower than the \$400 figure but we can guarantee it will not be higher.

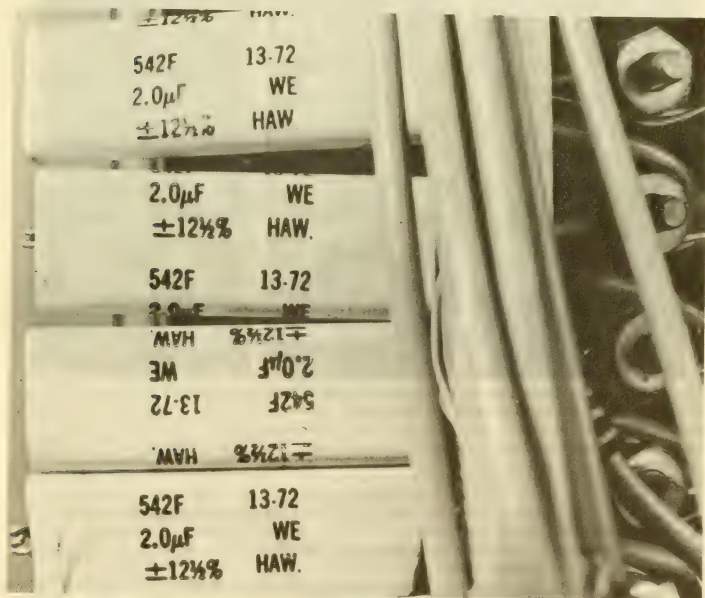
The installation cost of \$1000 is also guaranteed as a maximum rate. This cost, again, is not yet in the tariff.

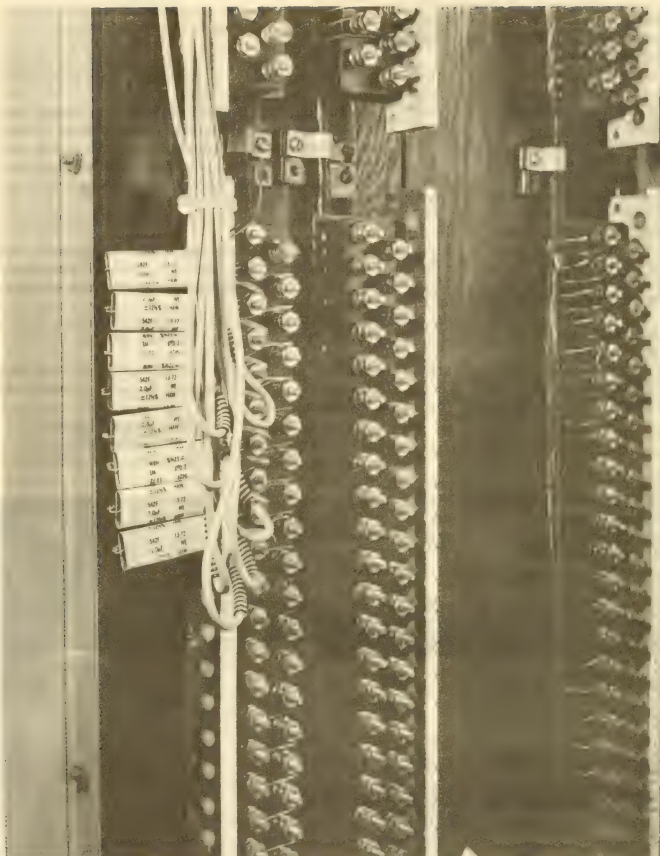
We are fairly certain this system will be available for your November first move. However, if we are delayed a month or two, we will install temporary service similar to your existing system with no additional installations charges for this temporary equipment.

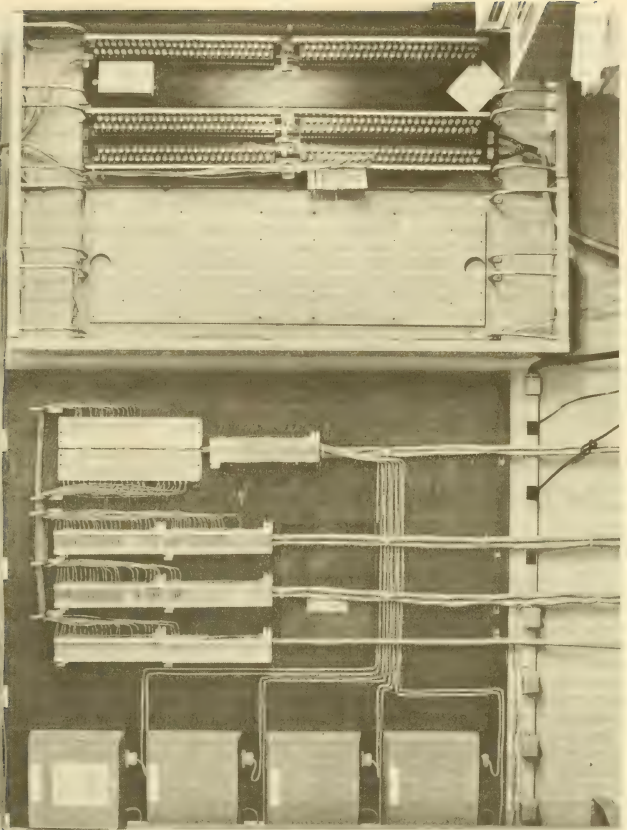
The proposed tariff would include a contract period of three to seven years. This will guarantee that the equipment rate will not increase during the contract period.

If you have further questions, please do not hesitate to call upon us. We can be reached at 266-6490. We at Mountain Bell are anxious to serve your total communications needs at your new location.

JEAN WARD,
JANE SMITH,
Communications Consultants.







Chairman WILLIAM G. ROSENBERG,
Michigan Public Service Commission,
Lansing, Mich.

BUSINESS COMMUNICATIONS, INC.,
April 30, 1974.

GENTLEMEN : The attached chronology depicts the gross inefficiency and negligence of Michigan Bell Telephone Company in performing service on their equipment associated with an inter-connected telephone system. Our many customers consider this method of operation by Michigan Bell Telephone Company as harassment. Although the Michigan Bell Telephone Company's policies causing this type of action were not necessarily written to cause harassment of interconnect customers, this is clearly de-facto harassment.

The enclosed history shows that Michigan Bell Telephone Company apparently wasted hundreds of dollars of its subscriber's money in their utterly inefficient practices and negligence in serving our system. I expect that their account practices would post these costs against "expenses involved in providing services to inter-connect customers" instead of "expenses involved in the installation and repair of unreliable Michigan Bell Telephone Company's property by untrained personnel."

The first category would clearly put inter-connect into a totally unfair light when rate base accounting entries are made.

Described below are several installations within the last twelve month period and the problems incurred.

Condamatic Company—Warren

Bell equipment not ready on specified date. Central Office cut-over not performed as specified on order. Numerous service problems with CDH interface. Untrained M.B.T. service personnel sent.

Hovis Screwlock Company—Warren

Bell installer spent nearly seven working days installing Two-STC-QX and Four-CDH interfaces.

Arkin Distributing Company—Novi

Defective central office cable pairs on cutover. Additional defective central office cable pairs within one week of cutover. Nearly 36 hours required to correct above condition.

Far Eastern Gospel Crusade—Farmington

After Michigan Bell Telephone installer left, there were defective central office cable pairs and non-working CDH interfaces due to improper strapping. Extreme difficulty in obtaining qualified Bell servicemen.

This is the basic information on only four (4) installations. Complete data as to dates, names and detail of problems incurred, is available from this writer.

We would welcome an opportunity to present this data to the Commission.

Sincerely,

LARRY A. WASSERMAN,
Vice President,
Business Communications, Inc.

BEFORE THE PUBLIC UTILITIES COMMISSION OF CALIFORNIA

Case No. _____

SCOTT-BUTTNER COMMUNICATIONS, INC., A CORPORATION, COMPLAINANT
vs.

THE PACIFIC TELEPHONE AND TELEGRAPH CO., A TELEPHONE CORPORATION,
DEFENDANT

COMPLAINT

The Complaint of Scott-Buttner Communications, Inc., 534 Twentieth Street, Oakland, California 94612, (415) 465-9900, respectfully shows:

1. That the defendant is the Pacific Telephone and Telegraph Company, 140 New Montgomery Street, San Francisco, California 94105, a public utility subject to the jurisdiction of the California Public Utilities Commission.

2. Scott-Buttner Communications, Inc., (hereafter referred to as Scott-Buttner or complainant), is a California corporation and existing customer of PT&T services, authorized to bring and file this complaint pursuant to Section 1702 of the California Utilities Code and Rule 9 of the Commission's Rules of Practice and Procedure. Complainant is also a competitor to PT&T, generally engaged in the business of selling, leasing, installing and maintaining customer-provided terminal communications equipment and systems.

3. Pursuant to the aforesaid statutory and procedural requirements, Scott-Buttner files this complaint, charging that Pacific Telephone and Telegraph Company's (PT&T's) tariff introducing the SG-1 PBX System (hereafter SG-1), as contained in Schedule Cal. P.U.C. No. 132-T, filed October 24, 1973, is unjust and unreasonable, and in violation of Section 451 of the California Public Utilities Code, as hereinafter set forth;

4. That the aforementioned SG-1 tariff will result in the grant of preferences to certain PT&T subscribers and impose disadvantages on other PT&T subscribers, in violation of Section 453 of the California Public Utilities Code, as hereinafter set forth; and

5. That the aforementioned SG-1 tariff has the effect of increasing other PT&T tariffed rates, contrary to representations made by PT&T in its Advice Letter No. 11165, stating that the SG-1 PBX rates would not increase any rate or charge, cause the withdrawal of service, or conflict with other tariff schedules or rules; and that, therefore, in violation of Section 454 of the California Utilities Code, PT&T did not tender to the Commission the necessary justification for consequential increases resulting from the alteration of compensatory rate development practices.

Wherefore, in support of the foregoing allegations, Scott-Buttner, on information and belief, alleges the following:

6. In Advice Letter No. 11165, filed October 24, 1973, PT&T introduced revisions of its Private Branch Exchange Service Tariff No. 12-T, Part XIII.

offering a so-called new Modular Dial PBX Service-Class D, to be generally available to all its utility customers in California. The "new" service featured was the SG-1 PBX System. Although the Advice Letter omitted to set forth the fact, the identifying letter and number code "SG-1" refers not to a newly manufactured Western Electric product, but to an electronic PBX manufactured, distributed and sold in the United States since 1971 by Northern Electric, Ltd., of Canada.

7. The SG-1 tariff was filed without a fixed, final rate. In its Advice Letter, PT&T euphemistically refers to SG-1 rates as "provisional", declaring that a tracking period is necessary to acquire actual costs, "i.e., engineering, plant, labor and maintenance to verify original revenue requirement estimates." (Advice Letter No. 11165, pg. 1, para. 4). This representation is entirely specious. Inasmuch as Northern Electric is supplying the SG-1, Western Electric and PT&T are not faced with a situation where the Bell System might perhaps reasonably claim a lack of manufacturing and distribution cost data due to inexperience with a new Western product. PT&T and Western Electric know exactly what they pay Northern Electric for the SG-1 serving vehicle. Therefore, PT&T's investment and operating costs are readily available. Not only will a public hearing disclose these costs, but PT&T with a high degree of accuracy can reasonably calculate its revenue requirements for the SG-1 from such available information. Moreover, with this available cost data, the Commission can prescribe reasonable and just compensatory rates for the SG-1, to stem further unnecessary revenue losses being incurred by PT&T during the balance of the current "provisional" tariff period.

8. Available evidence demonstrates that PT&T rates for the SG-1 System are not only lower than those for comparable PT&T-PBX systems; but equally important, SG-1 rates are priced unjustifiably below reasonable costs associated with furnishing SG-1 equipment. Because Northern Electric has been marketing the SG-1 to the interconnect industry over the past two years, the equipment price and associated cost of furnishing a total SG-1 service, is well known throughout the carrier and interconnect industries. From the general availability of this cost and marketing experience, it can be established that PT&T's tariffed SG-1 rates fall within a range of 35% to 42% below a level of pricing which is sufficient to yield a return above costs. Therefore, SG-1 rates are not only noncompensatory, but compel other telephone corporation customers to subsidize the revenue deficiencies created by users of PT&T's SG-1 service.

9. There is sufficient evidence on which to base a presumption that the noncompensatory level of SG-1 rates results from a predatory design and intent of PT&T to lessen and destroy competition. The SG-1 is an electronic private branch exchange tailored to small and medium sized business communications requirements of telephone customers for system configurations ranging from 40 to 80 stations with a capacity of up to 30 trunks. Although the SG-1 is electronic, and offers some advantages in terms of equipment size, modularity and operations, it nevertheless competes with comparable cross-bar private branch exchanges, furnishing equivalent feature services which Bell System companies, including PT&T, typically include in their 300 Series PBX packages. The SG-1 is thus interchangeable with comparable PT&T 300 Series PBX feature services; and, in addition, competes with similar electronic PBXs distributed by interconnect manufacturers and suppliers.

10. Complainant markets an electronic PBX system, known as the SBCI, which is comparable to, and competes with, the PT&T-Northern Electric SG-1. While the SBCI is functionally and technically of like grade and quality to the SG-1, unexplainably PT&T's monthly tariffed rates for the SG-1 are 39% to 48% lower than complainant's minimum and most basic charges for the equivalent product. Given inflation, rising labor costs, and equivalent product costs for commodities dependent on like technologies, a presumption inevitably arises that PT&T is underpricing to destroy competition. And, in fact, over a two month period, complainant has lost sales of \$240,000 to the SG-1, strictly on price considerations alone. Because of severe SG-1 underpricing, Scott-Buttner has been substantially and materially injured, has suffered competitive erosion of the electronic PBX market, and is certain that by the expiration of PT&T's "provisional" period, competition and interconnect sales volumes will be lessened to margins adversely effecting the profitability of continued business.

11. PT&T would have the Commission believe its SG-1 (underpriced) rates cannot be accurately determined because of insufficient experience from which to develop reliable costs. In fact, the obviously strategy behind its "provisional" rates is to circumvent Commission Tariff filing procedures for establishing reasonable and compensatory rates in connection with the introduction of a new utility offering; and, through the creation of underpricing advantages, to stifle competition in the electronic PBX market.

12. Complainant's objective is not to impair PT&T's right to compete in the electronic PBX market on fair and reasonable terms. Reasonable price differentials based on legitimate differences in product costs, and legitimate product competition based on product distinctions which serve a variety of customer needs, constitute the kind of conditions to be encouraged in a responsive and responsible market. But complainant maintains that these appropriate conditions for competition are perverted where, as in the instant case, (1) PT&T's SG-1 rates are non-compensatory; (2) they heap undue burdens upon, and cause discrimination between residential and commercial utility customers of other utility services; (3) the financial burdens, caused by non-compensatory rates, will increase and multiply over time if predatory pricing practices are allowed to continue; (4) the SG-1 offering necessarily results in unlawful discrimination between PT&T business customers through the distortion of rate relationships among like and similar utility services; and (5) the use of "provisional" pricing techniques are advanced to avoid regulatory review and, by concerted design, are intended to achieve anti-competitive effects. The product relationships and foregoing results are shown from the following exhibits:

A. *Exhibit 1* presents a comparative product feature analysis of three competing PBX services: namely, PT&T's 300 Series PBX, the PT&T SG-1, and complainant's SBCI system. The 300 Series PBX employs one or more Western Electric standard model cross-bar serving vehicles, while both the SG-1 and SBCI are fully electronic switching systems. All these products enjoy close resemblances in feature service capabilities; and while the SG-1 and SBCI are functionally comparable, the SG-1, however, contains some minimal but added feature options not available in the SBCI. Because of this feature service comparability between PT&T's 300 Series and SG-1, and between those offerings and that of complainant, there is a high degree of product interchangeability, and substitution potential, based on price differentials and minimal variations in customer needs.

EXHIBIT I.—FEATURE ANALYSIS

Feature	Series 300 PABX	SG-1 PABX	SBCI system (T/R 32)
Direct outward dialing	Yes	Yes	Yes.
Station to station dialing	Yes	Yes	Yes.
Station hunting	Yes	Yes	Yes.
Call transfer-attendant	Yes	Yes	Yes.
Call restriction	Yes	Yes	Yes.
Power failure transfer	Yes	Yes	Yes.
Night service	Yes	Yes	Yes.
Direct station selection	Yes	Yes	Yes.
Station busy lamp field	Yes	Yes	Yes.
Attendant camp-on	Yes	Yes	Yes.
Indication of camp-on	Yes	Yes	Yes.
Attendant conference	Yes	Yes	Yes.
Call transfer—individual	Yes	Yes	Yes.
Consultation hold	Yes	Yes	Yes.
Add-on conference	Yes	Yes	Yes.
Trunk answer from any station	Yes	Yes	Yes.
Executive ringback/override		Yes	No.
Barge-in		Yes	No.
Lock-out		Yes	Yes.
Secrecy		Yes	No.
Busy verification		Yes	Yes.
Splitting		Yes	No.
Volume control		No.	Yes.

B. *Exhibit II* shows some representative line and trunk configurations in which PBX systems are frequently sold, and compares PT&T's tariffed monthly rates for a basic SB-1 compared to monthly prices for which Scott-Buttner markets the SBCI system. The Exhibit clearly establishes that PT&T charges are 39% to 48% less than complainant's, for functionally and technically similar equipment. Based on the fact, shown in Exhibit I, that the SG-1 offers slightly greater feature capabilities, there is at least a presumptive inference of underpricing resulting from the showing of substantially lower charges for more services in an economy rent with run away inflation.

EXHIBIT II.—MONTHLY RATE COMPARISON 1—P.T. & T.'s SG21 vs. SCOTT BUTTNER SBCI SERVICE

Configuration lines/trunks	SG-1 tariff (P.T. & T.)	SBCI (TR-32)	Difference	
			Amount	Percent
40/10.....	\$385.65	\$681.94	\$296.29	43.45
40/15.....	439.75	724.42	284.67	39.30
60/10.....	466.50	822.61	356.11	43.29
60/15.....	518.00	865.04	347.04	40.12
60/20.....	550.25	927.13	376.88	40.65
80/15.....	556.00	1,078.90	522.90	48.47
80/20.....	588.25	1,126.53	538.28	47.78
80/29.....	656.55	1,268.16	611.61	48.23

1 P.T. & T. installation charge also applicable.

C. *Exhibit III* compares PT&T SG-1 monthly rates with competing 300 Series PBX service. While the two services employ different technologies, market factors are primarily influenced by the comparability of features and prices. Inasmuch as the SG-1 provides more comprehensive features than those found in 300 Series PBX service, the Exhibit reveals the extent of rate distortions between the two services, and provides strong evidence of discrimination between similarly situated PBX utility customers. Depending on variations in line and trunk configurations, SG-1 rates are nearly equal to, or more than 16% less than, monthly rates for 300 Series service. This syndrome of "more for less" pervades PT&T's SG-1 offering, and requires a full explanation and hearing.

D. *Exhibit IV* furnishes the calculated book cost for a representative SG-1 system, configured to provide 40 stations and 8 trunks. (The Exhibit forms the basis for developing a compensatory rate, and similar studies, not included in this complaint, were made for the development of all SG-1 compensatory rate projections contained in Exhibit VIII, *infra*.) The investment cost calculations result from widely distributed Northern Electric price lists, and are authoritative. Where estimates were required for installation accessories and labor, the most conservative cost calculations were used in order to err of the side of underestimating expense, to favor PT&T with every benefit of doubt. As stated, the source of cost data for the basic SG-1 system, and associated hardware components, was Northern Electric price lists, dated 1972. Despite rising inflation over the past two years (and major wage disputes experienced by Northern Electric in 1973), to the best of complainant's knowledge, information and belief, Northern's 1972 prices are still in effect. For the SG-1 configuration indicated, the Exhibit study presents a book (investment) cost of \$14,917.00 from which a reasonably compensatory rate was determined by using standard Bell System techniques employed in making revenue requirements studies.

EXHIBIT III.—MONTHLY RATE COMPARISON¹—P.T. & T.'s SG-1 vs. P.T. & T.'s SERIES 300

Configuration lines/trunks	SG-1 tariff (P.T. & T.)	Series 300 tariff (P.T. & T.)	Difference	
			Amount	Percent
40/10.....	\$385.65	\$454	\$68.35	15.06
40/15.....	439.75	454	14.25	3.14
60/10.....	466.50	556	89.50	16.10
60/15.....	518.00	556	38.00	6.83
60/20.....	550.25	556	5.75	1.03
80/15.....	556.00	658	102.00	15.50
80/20.....	588.25	658	69.75	10.60
80/29.....	656.55	658	1.45	0.22

¹ P.T. & T. installation charge also applicable.

Exhibit IV.—SG-1 Book Cost

Configuration; 40 stations, 8 trucks:

Basic system (common equipment).....	\$4,515
20-line circuits.....	2,360
8 gain C. O. trunks.....	1,448
Universal trunk control.....	181
Access to paging trunk.....	94
Attendant camp-on, etc.....	153
Call transfer, etc.....	138
Barge-in, etc.....	102
Attendant key sending digitone.....	89
Option shelf.....	36
Digitone receiver sub-shelf.....	80
Digitone interface.....	164
2 Digitone receivers.....	784
Busy lamp field sub-shelf.....	85
Busy lamp field control.....	156
Attendant console with busy lamp field.....	356
Attendant console headset.....	79
Plus: 40 telephones at \$33, ¹ each.....	1,320
Total apparatus.....	12,140

Installation:

Cable and miscellaneous hardware on switch ¹	350
Cable and miscellaneous hardware on telephone sets ¹	375
Labor, 216 hrs. at \$9.50 ¹ hour.....	2,052
Total installation.....	2,777
Total book cost.....	14,917

¹ Reasonable estimate based on industry experience.

SOURCE.—Northern Electric Price List to U.S. Distributors for N.R.'s PULSE EPABX.

**Exhibit V.—P.T. & T. Revenue Requirements Survey Cost Development in
Support of Compensatory Rate**

[40 Station, 8 Trunk Configuration.]

First cost:	
Apparatus-----	\$12, 140. 00
Installation-----	2, 777. 00
	<hr/>
Total book cost ¹ -----	14, 917. 00
Calculations:	
Maintenance, 0.073 times Total Bk ² -----	1, 088. 94
Ad valorem tax, 0.031 times Total Bk ³ -----	462. 43
Overheads:	
a. Traffic expense, 0.029 times Total Bk ⁴ -----	432. 59
b. Commercial expenses, 0.028 times Total Bk ⁵ -----	417. 68
c. General office salary and expense 0.018 times Total Bk ⁶ -----	268. 51
d. Other operating expense 0.030 times Total Bk ⁷ -----	447. 51
e. Uncollectables 0.003 times Total Bk ⁸ -----	44. 75
Depreciation, 0.076 times Total Bk ⁹ -----	1, 133. 69
FNIT, 0.466 (Net Operating Revenue minus Interest)-----	1, 171. 55
Interest at 7¾ percent (45% debt financing), 0.035 times Total Bk-----	522. 10
Return, 0.090 times Total Bk-----	1, 342. 53
	<hr/>
Annual revenue need-----	7, 332. 28
Conclusion:	
Compensatory monthly rate equals \$599.83. ¹⁰	

¹ See exhibit IV for apparatus and estimated installation charges.

² Yearly maintenance expense factor is developed from the FCC Form M for PT&T for the year ending December 31, 1972, by dividing total maintenance expense (part 35, line 18) by total telephone plant in service (part 12A, line 29).

³ Ad valorem tax factor is developed from the above-referenced FCC form M by dividing the total other operating taxes (part 36A, line 17) by the above-referenced total telephone plant in service.

⁴ Traffic expense factor is developed from above-referenced FCC form M by dividing total traffic expenses (part 35, line 36) by the above-referenced total telephone plant in service.

⁵ Commercial expense factor is developed from above-referenced FCC form M by dividing total commercial expenses (part 35, line 45) by above-referenced total telephone plant in service.

⁶ General office salaries and expense factor is developed from above-referenced FCC form M, by dividing total several office salaries and expenses (part 35, line 51) by above-referenced total telephone plant in service.

⁷ Other operating expense factor is developed from above-referenced FCC form M by dividing total other operating expenses (part 35, line 61) by above-referenced total telephone plant in service.

⁸ Uncollectables factor is developed from above-referenced FCC form M by dividing uncollectable operating revenues (part 34, line 41) by above-referenced total telephone plant in service.

⁹ Annual depreciation factor is taken directly from FCC order, released January 16, 1974 (FCC 74-11, 07837).

¹⁰ Rates are developed on a fully distributed cost basis, using the installation charge allowed in the current SG-1 tariff.

E. *Exhibit V* presents an annual revenue requirement (Annual Revenue Need) and corresponding compensatory monthly rate for a 40 line/8 trunk SG-1 system. The Exhibit calculation results in a compensatory monthly rate of \$599.83 for the configuration studied. The procedures used in developing the Exhibit were also employed in calculating investment costs for other line and trunk configurations studied in the presentation of compensatory rates shown in Exhibit VIII, *infra*. Greater investment costs naturally arise from the addition of SG-1 equipment components, accessory materials, and higher labor costs experienced in connection with larger system configurations. It is important to note that while PT&T's tariffed installation charges were used for the purpose of making the study calculations (see fn. 10, Exh. V, p. 2), complainant does not concede the accuracy of PT&T's costs with respect to these rates, nor even that there is any cost to rate relationship.

Exhibit VI.—Compensatory Rate of Return Analysis (9 Percent)

(40 Station, 8 Trunk Config.)

Monthly rental	\$599. 83
Annual rental (NR times 12)	7, 197. 96
Installation charge	1, 719. 00
Annualized installation charge (\$1,719.00 divided by 12.8 years) ¹	134. 30
Total annual revenue (\$7,197.96 divided by \$134.30)	7, 332. 26
Less:	
Total operating expenses (maintenance, ad valorem tax, overheads and depreciation)	4, 296. 10
Net operating revenue	3, 036. 16
Subject to tax (Net operating revenue minus interest)	2, 514. 06
FNIT (0.466 times \$2,514.06)	1, 171. 55
Net operating revenue after tax (\$3,036.16 minus \$1,171.55)	1, 864. 61
Less:	
Interest	522. 10
Net income after tax	1, 342. 51
Net income after tax as a percentage of total bk. cost (\$1,342.51 divided by \$14,917.00) times 100	9. 0

¹ See FCC Order, Released Jan. 16, 1974, FCC 74-11, 07837, as referenced in Exhibit V.

F. *Exhibit VI* presents a verification of the calculations made in Exhibits IV and V, to prove that a pre-determined monthly rate will produce a desired rate of return (in this case, 9%). This study technique is frequently used in the Bell System, and reflects a revenue requirement analysis procedure programmed in Bell computers for the use of Bell rate and marketing departments. It requires in-putting only three figures, a pre-determined monthly rate, installation charge, and desired return, (the first two figures being generally developed from market studies rather than the price of a Western Electric product), and the computer outputs the operating expense factors that must be stated in order to reach the desired rate of return on investment. For the purpose of the Exhibit study, the procedure was modified to use factors derived from the Uniform System of Accounts (Form M) rather than attempting to alter operating expense factors to verify a preconceived result. The complainant has no information on which to base a belief that the Commission would approve more or less than a 9% rate of return on the SG-1, but based its calculation on the fact that the FCC has permitted AT&T to earn up to 9%.

EXHIBIT VII.—PROJECTED REVENUE LOSS STUDY FOR P.T. & T.'s SG-1 AT CURRENT TARIFF RATES

Projected cumulative charges and estimated losses ¹	40/8 configuration		80/16 configuration	
	Non-compensatory ²	Compensatory ³	Non-compensatory	Compensatory
1st year:				
Charges	\$6, 024. 00	\$8, 916. 96	\$9, 195. 40	\$14, 034. 64
Revenue loss	(\$2, 892.98)		(\$4, 839. 24)	
Percent revenue loss	(32. 4)		(34. 5)	
3d year:				
Charges	\$14, 634. 00	\$23, 312. 88	\$22, 694. 20	\$37, 211. 92
Revenue loss	(\$8, 678. 88)		(\$14, 517. 72)	
Percent revenue loss	(37. 2)		(39. 0)	
5th year:				
Charges	\$23, 244. 00	\$37, 708. 80	\$36, 193. 00	\$60, 389. 20
Revenue loss	(\$14, 464. 80)		(\$24, 196. 20)	
Percent revenue loss	(38. 4)		(40. 1)	
8th year:				
Charges	\$36, 159. 00	\$59, 302. 68	\$56, 441. 20	\$95, 155. 12
Revenue loss	(\$23, 143. 68)		(\$38, 713. 92)	
Percent revenue loss	(39. 0)		(40. 7)	

10th year:				
Charges.....	\$44,769.00	\$73,698.60	\$69,940.00	\$118,332.40
Revenue loss.....	(\$28,929.00)		(\$48,392.40)	
Percent revenue loss.....	(39.3)		(40.9)	
12th year:				
Charges.....	\$53,379.00	\$88,094.52	\$83,438.80	\$141,509.68
Revenue loss.....	(\$34,715.52)		(\$58,070.88)	
Percent revenue loss.....	(39.4)		(41.0)	
15th year:				
Charges.....	\$66,294.00	\$109,688.40	\$103,687.00	\$176,275.60
Revenue loss.....	(\$43,394.40)		(\$72,588.60)	
Percent revenue loss.....	(39.6)		(41.2)	

¹ The SG-1 tariffed installation charge was used for both noncompensatory and compensatory calculations. (That is \$1,719 for 40/8 configuration, \$2,446 for 80/16 configuration.)

² Noncompensatory entries are calculated from those monthly rates reflected in P.T. & T.'s tariff changes accompanying advice letter No. 11165, filed Oct. 24, 1973.

³ Compensatory entries reflect reasonable estimates of monthly rates determined according to procedures described in exhibits IV and V.

G. *Exhibit VII* projects the cumulative receipts and attendant cumulative revenue losses over a number of billing years for the SG-1 System at its currently offered tariffed rate compared with cumulative revenues at a reasonable and compensatory rate. The Exhibit shows that the SG-1 produces cumulative revenue losses from 32% to 39% in a 40 station/8 trunk configuration, and from 34% to 41% in an 80 trunk/16 station configuration. In addition to highlighting the grossly non-compensatory price levels for the SG-1, the Exhibit further reveals the extent of the cross-subsidization burdens which the SG-1 imposes on other tariffed services.

H. *Exhibit VIII* provides a recapitulation of the disparity between compensatory and currently tariffed monthly rates for common configurations of the SG-1. The left hand column shows that the current tariff is priced 35% to 42% below reasonable, compensatory levels. It also sets forth complainant's SBCI rates to show, on comparison, that PT&T would not be injured or placed at a competitive disadvantage by fair price competition.

13. The foregoing Exhibits conclusively establish that the SG-1 rates are entirely too low to compensate for all the hardware and other investment costs, and operating expenses, associated with the offering. Furthermore, the Exhibits show that SG-1 rates are also substantially less than PT&T 300 Series PBX charges; and at least offer presumptive evidence of the fact that discrimination arises between utility customers of like PBX services, and/or that substantial change outs of 300 Series equipment in favor of the SG-1 are likely to occur. Both consequences produce illegal effects; the former being patently illegal under Section 453 of the California Utilities Code; the latter being contrary to Sections 451, 453 and 454 of the Code in willfully stimulating premature obsolescence of utility plant, which in turn adversely effects PT&T's rate base, rate of return and revenue requirements.

EXHIBIT VIII.—RECAPITULATION—COMPENSATORY VERSUS NON-COMPENSATORY RATES

Lines/trunks (c.o.)	SG-1 compensatory rates	SG-1 tariffed rates	Tariff discount from compensatory	
			Amounts	Percent
40/8.....	\$599.83	\$358.75	\$241.08	40
40/10.....	614.36	385.65	228.71	37
40/15.....	676.73	439.75	236.98	35
60/10.....	776.33	466.50	309.83	40
60/12.....	794.38	479.40	314.98	40
60/15.....	843.14	518.00	325.14	39
60/20.....	879.46	550.25	329.21	37
80/15.....	958.45	556.00	402.45	42
80/16.....	965.72	562.45	403.27	42
80/20.....	994.78	588.25	406.53	41
80/29.....	1,075.89	656.55	419.34	39

COMPARISON OF COMPENSATORY SG-1 RATES TO SBCI COMPETITIVE RATES

Configuration, lines/trunks	SG-1 compensatory rates	SBCI competitive rates
40/10.....	\$614.36	\$681.94
40/15.....	676.73	724.42
60/10.....	776.33	822.61
60/15.....	843.14	865.04
60/20.....	879.46	927.13
80/15.....	958.45	1,078.90
80/20.....	994.78	1,126.53
80/29.....	1,075.89	1,268.16

14. The Exhibits also create a strong presumptive inference of PT&T's intent to destroy competition in the electronic PBX market. There is no necessity, for example, for PT&T to introduce the SG-1 on a "provisional" basis, except for its intent to avoid submitting cost information from which a change of anti-competitive conduct would surely have ensued the filing of the original Advice Letter of October 24, 1973. Adequate cost data from which to determine PT&T's revenue requirements is available, as complainant's Exhibits demonstrate. Moreover, there exists within the industry, within the multitude of regulatory agencies, and especially within the Bell System itself, well known and accepted economic methods, procedures and conventions from which PT&T could have accurately determined its annual revenue requirements and compensatory monthly rates for the SG-1, without injecting a "provisional" trial period.

15. It is clear, beyond proof or doubt, that below cost pricing of competitive products and services generally attends a design to destroy competition. Therefore, the resort to a "provisional" tariff to avoid Commission review, and thereby to cloak the anti-competitive practice in a mantle of credibility, is contrary to the public interest. For this reason the California Supreme Court has directed the Commission to consider antitrust implications in deciding rate proposals before it. *Northern California Power Agency v. Public Utilities Commission*, 5 Cal. 3rd 370 (1971). Antitrust issues are clearly presented on this complaint, and mere claims that a tariff is "provisional" in nature and duration are insufficient to justify allowing PT&T to persist in the perpetration of unlawful pricing practices. The fact that complainant has, in the form of its Exhibits and charges contained herein, brought relevant cost data and important public policy considerations to the Commission's attention, compels the Commission to immediately grant a hearing with respect to these rates and practices, the scheduled "provisional" period notwithstanding. Any defense that the "provisional" period will end, and that rate adjustments can then be made, is insufficient to avoid the inequities, injury and damage which will occur in the interim; and is equally ineffective to stop the massive utility revenue deficiencies being generated to the disadvantage of all California utility customers who are asked to subsidize PT&T's policy of stifling competition.

16. Pacific Telephone and Telegraph's SG-1 PBX system employs common equipment and optional components manufactured and supplied by Northern Electric, Limited, of Canada. In the course of filing its SG-1 tariff PT&T did not offer any factual evidence or other indication of the market for the equipment; it did not offer any forecast of the number of SG-1 components inventoried to meet projected SG-1 demand; nor did it otherwise give any assurance of access to sufficient SG-1 supplies from which to serve any and all potential utility customers within a reasonable period of time. To the extent Northern Electric cannot timely supply PT&T's requirements for SG-1 apparatus, the subject tariff offering is a sham, a deceptive holding out of unavailable service to the public, and only a limited and illegal offering of equipment and services to a preferred selection of prospective utility customers who stand in the impact area of competition.

17. Since 1972, Northern Electric has been engaged in the distribution and sale of its SG-1 Pulse EPABX line to interconnect suppliers throughout the United States. These suppliers were successful in marketing the SG-1 until recently when Northern Electric, claiming manufacturing and labor difficulties, began cutting back on interconnect purchase orders. Contemporaneous

with this cut back, however, either PT&T or Western Electric apparently secured a contract with Northern and PT&T tariffed the SG-1. The fact that Northern Electric has not been able fully to meet the modest demand of U.S. interconnect suppliers for SG-1 equipment suggests it likewise may not be able to supply fully and timely the apparatus requirements of PT&T. This likelihood is, of course, heightened so long as PT&T is allowed to continue offering the SG-1 below cost, at non-compensatory but attractive rates.

18. Unless PT&T can demonstrate to the satisfaction of the Commission that it has made a realistic forecast of what the SG-1 market will require, and that it has access to an adequate and reliable supply of equipment to meet demand, the offering of the service can only result in unlawful discrimination and preferences among PT&T's PBX customers, in violation of Section 453 of the California Public Utilities Code.¹ Without sufficient supplies from Northern Electric, PT&T cannot make SG-1 service generally available. It must, instead, unlawfully focus its marketing effort on selected customers, namely those markets most likely to be facing competing interconnect suppliers.

19. As a separate ground of offense, complainant maintains that PT&T, in filing Advice Letter No. 11165, did not comply with Rule III. C. of the Commission's Rules in that it failed to provide information required in connection with such filings. (Rules Governing Filing and Posting of Tariff Schedules, General Order No. 96-A.)

A. The rules provides that:

"Advice letters shall call attention to each increase or decrease in rate or charge, or change in condition which may result in an increase or decrease, more or less restrictive conditions, or withdrawal of service." (Emphasis added.)

In its Advice Letter, PT&T stated that the proposed new tariff "will not increase any rate or charge, cause the withdrawal of service, nor conflict with other schedules or rules". PT&T failed to state, however, that the SG-1 prices at least constituted a "change in condition which may result in an increase or decrease" in rates. Depending on the availability to PT&T of sufficient supplies of SG-1 apparatus, general customer knowledge of SG-1 service will inevitably have the effect of penetrating PT&T's 300 Series market, and other comparable PBX offerings. Hence, the service will cause (1) an increase in the rates of other services to subsidize the adversely affected market; (2) an accompanying decrease in rates for affected and related PBX services in order to minimize premature obsolescence of associated equipment; and (3) disproportionate increases in PBX trunk and toll (or message unit) rates to compensate and off-set PBX equipment rate and revenue deficiencies.

B. The rule further provides that:

"When the filing covers new service not previously offered or rendered, the general affect of such filing should be explained. The advice letters should state whether or not present rates or charges will be affected, deviations or conflicts created, or service withdrawn from any present user."

PT&T's Advice Letter states:

"This filing introduces the new SG-1 System. The new SG-1 offers features which are not available in our present product line." The SG-1 does not offer significantly new features, but rather contains functional attributes of an electronic design which offers more compactness in size and silence in operation than may be found in other Western Electric PBX serving vehicles. The SG-1 was to be, and currently is being, offered at rates comparable to, and in most instances substantially less than PT&T 300 Series PBX services. (See Exhibit III) PT&T did not explain the difference in quantity or quality of service for the same or even lower rates; nor did it explain the effects the proposed new service would have on early obsolescence of existing PBX equipment due to change-outs and the capital expenditures required to purchase replacement SG-1 apparatus; nor did it explain the resulting effect of the proposed new offering on PT&T's rate base and tariffs for other classes of customers and types of service. These consequences are pertinent to an

¹ The discrimination here discussed relates to the making or granting of preferences as to facilities, including the creation of disadvantages in the availability of facilities, and is asserted as a separate ground of unlawfulness in addition to the heretofore alleged discrimination arising out of rate relationships associated with like PB- services.

adequate appraisal by the Commission of the proposed rates and competitive impact of the service. PT&T's failure and omission in this regard is not only a blatant violation of Commission Rules, but violates as well Section 454 of the California Public Utilities Code.

C. PT&T's Advice Letter does point out that:

"The charges and rates for the SG-1 are 'provisional' for a maximum period of 18 months to allow adequate time to accumulate tracking data. . . . i.e., engineering, plant, labor, and maintenance to verify original revenue requirement study estimates." (Advice Letter No. 11165, p. 1)

This information alone, however, even if fully reported to the Commission before expiration of the experimental period would not rectify the filing deficiencies; nor would more definite information on engineering and plant costs, for example, contribute to a Commission inquiry into the unavoidable market consequences on other PT&T services, or the anticompetitive impact on complainant and other competitors. Given the responsibility of the Commission for judging the lawfulness of rates, and the type of information which the Commission deems necessary to carry out this function as evidenced by the clear language of Rule III. C., it is imperative that PT&T be ordered to fully comply with the Rule and to provide such information to the Commission, the complainant, and all other interested parties.

D. The foregoing Exhibit compensatory studies develop operating expenses on the basis of normal overhead factors disclosed by the Uniform System of Accounts (Form M). The full impact of the subsidization, inherently resulting from the SG-1 offering, is not fully determinable from a compensatory revenue requirements study that assumes all expenses are usual and normal, and are being treated in a normal manner. Complainant believes there are extraordinary administrative expenses associated with the SG-1, including a large number of highly paid specialists, such as:

Marketing Sales Personnel

Training Advisors (PBX-SG-1)

Plant Training Personnel for SG-1 PBX Business Service

Specialized Traffic and Study Personnel

PBX Equipment Engineers and Traffic Engineers not working on particular installations

Various Staff Groups whose functions center around Business Customers

All of these premium and extraordinary expenses should have been submitted with the SG-1 filing in order to comply fully with the Commission's Rule III.C., and the Commission is respectfully requested to order the presentation of this data in order that the full subsidization impact of the SG-1 can be assessed.

20. PT&T has cautioned the Commission and the public in its Advice Letter that the charges and rates for the SG-1 are "provisional" for eighteen months while it accumulates data from which to verify revenue requirements.

There is nothing wrong, *per se*, in permitting such experimental offerings, even for competitive services. It has been recognized, however, that where competitive considerations are involved in a tariff offering, such as the SG-1, the Commission itself has a substantial role to play in ordering or otherwise prescribing the conditions, length of time, type of record keeping, and identification of information to be sought during the experimental period. The Commission exercised these very prerogatives, for example, in *Dialalarm Corp. v. Pacific Telephone and Telegraph Co.*, Decision No. 73572, Case No. 8620 (January 3, 1968) 67 CPUC 759, where it supervised a three-year experimental period during which PT&T was to determine and report on the reasonableness of all costs of service, including its equipment price from Western Electric, for a competitive telephone alarm device. The Commission similarly prescribed a one-year experimental cost-gathering period for a hospital interphone system in *Fisher Berkeley Corp. v. Pacific Telephone and Telegraph Co.*, Decision No. 74618, Cases Nos. 8662 and 8663 (August 27, 1968) 68 CPUC 649. In these cases, it was the Commission's considered judgment that sufficient cost data was not available to warrant the avoidance of an experimental period. But the experiment itself was not authorized as a unilateral decision of the telephone company.

21. However, complainant's Exhibits IV and V presumptively, if not conclusively, establish that relevant cost information and rate setting practices are presently available from which PT&T and the Commission can ascertain

revenue needs and corresponding reasonable and compensatory charges for PT&T's SG-1 service, without the need for any experiment. Regardless of the fact that this same information was available, and the same methods applicable, at the time PT&T filed its Advice Letter last October, the current and continuing injury as well as the illegal effects resulting from PT&T's further offering of SG-1 service at its "provisional" rates, require that the Commission interrupt and investigate the offering immediately.

22. Failure to terminate the SG-1 tariff offering or to immediately establish compensatory "provisional" rates, pending full hearing, will result in irreparable damage to the complainant, and to the public. In the three months since this tariffed offering was introduced, complainant has suffered damages in the sum of \$240,000 due to PT&T's below cost selling of the SG-1. If PT&T's SG-1 rates are allowed to remain in effect, complainant will be prevented from continuing to offer its SBCI system without suffering severe financial losses to its business.

23. In addition, during the short three month period in which the SG-1 has been available, the public has also suffered substantial injury—injury which is likely to continue if PT&T's "provisional" rates are allowed to stand. Based on an assessment of what compensatory rates would have been, PT&T through underpricing practices employed in sales competition with complainant, has won SG-1 business that produces approximately \$27,000 in annual revenue deficiencies burdening other utility customers. This voluntary generation of revenue losses, of course, relates only to PT&T sales about which complainant has knowledge, and does not include the subsidization impact absorbed by PT&T with the SG-1 in competition with other interconnect distributors during the same period. With respect to the later effects, complainant has no knowledge, but believes PT&T's annual revenue losses due to underpricing already exceed \$150,000 in rental receipts. If the trend continues, complainant further believes it will prove the existence of a conscious decision by PT&T to give up over \$1 million in annual revenues during 1974 in order to destroy competition in the electronic PBX market.

24. PT&T's SG-1 offering also threatens the general public in another way. Severe injustice awaits existing and prospective customers of the PT&T SG-1 who have been, or will become, deceptively attracted to the offering at its "provisional" rates. These customers stand to suffer severe financial disruption at the termination of the "provisional" period when PT&T revises its rates upward, and begins charging to collect accumulated costs. As evidenced by the compensatory rate levels shown in Exhibits V and VIII of this complaint (and, of course, depending on how successfully PT&T nullifies interconnect competition over the remaining fourteen months), one can forecast final compensatory rates which will be substantially higher than those currently charged. Customers, at that point, will be "locked in" to the PT&T service at higher rates, or will be forced to discontinue the service and forfeit substantial premature termination penalties as a consequence. Not only will they have no resource against PT&T for damages and disruption in service suffered thereby, but alternative sources of supply may be non-existent, having been forced out of business by the "provisional" anti-competitive pricing of PT&T. While it is doubtful that either existing or prospective customers have been given sufficient notice of the likelihood of forthcoming SG-1 rate revisions, it is certain that they have no idea of the possibility of rate increases on the order of 35% to 42% (See Exhibit VIII), which PT&T will have to charge if the SG-1 is to become compensatory. While PT&T's Advice Letter promises a review of costs for engineering, plant, labor and related expenses, it makes no reference to the probability of substantial adjustments for the cost of SG-1 equipment itself.

Wherefore, in view of the foregoing premises, complainant respectfully requests interim and permanent relief.

A. suspending PT&T's SG-1 System rates at their existing "provisional" levels; prescribing reasonable interim rates pending the completion of full adjudicatory hearings; and setting full public hearings to determine the lawfulness of, and to fix prescribed compensatory rate levels for all SG-1 service as presently offered;

B. requiring PT&T, in the submission of proposals and at the point of sale, to notify all utility customers that SG-1 rate quoted is only effective until May 25, 1975 and may be substantially increased on or before that time either

by action of the telephone company or of the California Public Utilities Commission; that all SG-1 rates are under challenge before the California Public Utilities Commission; and that on and after 30 days from the date hereof, PT&T shall specifically disclaim to every prospective SG-1 utility customer that any rate proposed or charged for SG-1 service may be guaranteed, or represented to be, firm as against any adjustment and/or change which could or may occur during or after the aforesaid provisional period ending on or before May 25, 1975;

C. requiring PT&T to immediately report to the Commission and counsel for complainants, the effect of SG-1 rates on general revenues and rate base by reason of its impact on its existing and projected 300 Series PBX and other comparable PBX offerings, and to otherwise fully comply with the requirements of Rule III. C. of General Order No. 96-A, as hereinabove set forth;

D. requiring PT&T to immediately submit to the Commission and counsel for complainant, under such protective orders as the Commission shall deem appropriate, complete data and evidence of its marketing program to stimulate SG-1 sales; of its SG-1 forecasted demand based on market stimulation; of its existing and projected revenues derived, and to be derived, from SG-1 service during the provisional period established, including the existing number of systems installed, number of customers for whom installed, line and trunk configurations for each customer, and monthly revenue derived from each of said customers; and of its ability, in terms of adequate equipment supplies, to offer SG-1 service on a non-discriminatory basis to any and all potential utility customers for service;

E. requiring PT&T to immediately furnish and disclose to the Commission and to counsel for complainant, its SG-1 equipment costs from its supplier, Northern Electric, Ltd., of Canada, together with copies of all contracts and contract terms and conditions of supply which either PT&T and/or Western Electric has entered into with Northern Electric, Ltd., of Canada; and

F. requiring PT&T to pay such damages as the evidence will show complainant has suffered by reason of defendant's commission of the illegal acts alleged; and to charge the profits of PT&T stockholders with such revenue deficiencies as the evidence will show to have resulted from the offering of SG-1 service to all existing utility customers at non-compensatory rates.

The citation of statutory and rule violations contained in the foregoing complaint should not be deemed to preclude findings with respect to any other offenses against California utility laws and Commission rules which the evidence may disclose.

Dated at Oakland, California, this 15th day of March, 1974.

Respectfully submitted,

SCOTT-BUTTNER COMMUNICATIONS, INC.

By EDWIN B. SPIEVAK,

By VICTOR J. TOTH,

Keller and Heckman, Washington, D.C.

By JAMES C. SOPER,

Fitzgerald, Abbott & Beardsley, Oakland, Calif.

Attorneys for Complainant.

VERIFICATION

I, Edgar M. Buttner, Chairman of the Board of Directors of Scott-Buttner Communications, Inc., the complainant herein, hereby affirm that I am authorized to verify the foregoing complaint brought on behalf of the said Scott-Buttner Communications, Inc., and that the statements and allegations of fact contained in the complaint are true of my own knowledge, except as to matters therein stated on information and belief, and as to those, I believe them to be true.

I declare under penalty of perjury that the foregoing statement is true and correct.

Wherefore, I have affixed my signature at Oakland, California, on this 15th day of March, 1974.

EDGAR M. BUTTNER,
Chairman of the Board,
Scott-Buttner Communications, Inc.

SEARS, ROEBUCK AND CO.,
Chicago, Ill., May 22, 1974.

Mr. GERALD HELLERMAN,
U.S. Senate,
Washington, D.C.

DEAR MR. HELLERMAN: Your letter of May 7, 1974, inquired about the decision by Sears, Roebuck and Company to use Illinois Bell telephone equipment in Sears Tower versus a purchase system. You also expressed interest in our views on interconnection and the necessary changes required to make it a viable segment of the communications industry.

In 1970, when we investigated the possibility of a purchased system for Sears Tower, interconnection had just begun to make an impact and then only in very small systems (up to 400 lines). Our requirements for Sears Tower were of the magnitude of a small central office (16,000 lines are ultimately projected for Sears Tower), and only two manufacturers in addition to Illinois Bell were interested in submitting bids for the system.

After careful investigation of the proposals, the communications staff recommended the use of the Bell System's Centrex III served by a #1 Electronic Switching System, the most advanced system in technology available in the industry. The recommendation was approved at the officer level of the Company, not by the Board of Directors as indicated in your letter. The decision was based solely on the facts determined in our investigation which included the more advanced technology of the Bell System equipment, the complexities and legal requirements of dealing with interconnect tariffs for a privately owned system, and, most importantly, maintenance of the system, including service restoral in the event of a disaster.

The latter item was of primary concern to us because the interconnect companies at the time of our decision were primarily engaged in manufacturing and had not established a service organization.

You also asked about our views regarding what changes are required to make interconnection a viable force in the communications industry. The single greatest deterrent in our opinion is the uncertainty of the regulatory environment at both state and federal levels. No company will risk the financial investment in a privately owned system as long as the possibility exists that it will be forced to remove it in favor of a telephone company system; i.e. witness the recent decision by the Nebraska attorney general that only telephone companies are permitted to own and operate telephone equipment and has ordered a motel chain to dispose of its privately owned system. The North Carolina Utility Commission is currently investigating similar rulemaking policies. Until these issues are resolved, interconnection will involve a high degree of risk which is not offset by sufficient financial returns.

I trust the above answers the questions raised in your letter.

Very truly yours,

F. G. CRAWFORD,
National Manager, Communications.

ESSENTIAL COMMUNICATIONS SYSTEMS, INC.,

Kenilworth, N.J., May 31, 1974.

Customer harassment by New Jersey Bell Telephone Co.

<i>Date</i>	<i>Name and City</i>
May 4, 1972-----	Dr. Andrew Silverman, Short Hills.
July 27, 1972-----	Dr. Stephen Parker, Roselle Park.
Aug. 15, 1973-----	Beck & Block Inc., Clifton.
Sept. 26, 1973-----	Ortho Diagnostics, Raritan.
May 23, 1972-----	N B Ju Jitsu Club, Belleville.
May 31, 1972-----	Thomas J. Lipton Co., Englewood Cliffs.
June 16, 1972-----	Royal Liquors Inc., Trenton.
May 2, 1972-----	Lowy, Binder, Lifson & Borrus, Millburn.
July 12, 1972-----	M. Bernadine Johnson, Esq., Newark.
June 12, 1972-----	Ed Kominsky, Florham Park.
Nov. 26, 1972-----	West Orange Board of Education, West Orange.
July 17, 1972-----	Business Incentives Co. Inc., Matawan.

Sept. 26, 1972-----	John L. Heningan, Clark.
Dec. 20, 1972-----	A. John Allen Co., Union.
Jan. 12, 1973-----	Statewide Acceptance Corp., Dunellen.
Feb. 13, 1973-----	Winans Construction Co., Linden.
Feb. 28, 1973-----	Scotch Plains Board of Education, Scotch Plains.
July 26, 1972-----	Orange Woodworking Co., Orange.
Mar. 2, 1973-----	Tony Scarria, Fanwood.
Nov. 18, 1972-----	Dr. Harvey Brooks, Hillside.
Mar. 31, 1973-----	Rosemore Land & Development Corp., Breille.
Mar. 31, 1973-----	J. Allen Gumbs, Esq., Perth Amboy.
Jan. 12, 1973-----	Prophet Foods, Union.
Nov. 13, 1972-----	Bergen County Passport Office, Hackensack; Elizabeth-town Water Co., Elizabeth.
Nov. 18, 1973-----	Springfield Board of Education, Springfield.
Mar. 1, 1973-----	Dr. Thomas Mahoney, Middletown.
May 1, 1973-----	Daily Journal, Elizabeth.
June 22, 1973-----	Dr. Robert Tarantino, Rutherford.
Sept. 28, 1973-----	Diamondhead Corp., Mountainside.
Oct. 2, 1973-----	Carl D. Schwalm, Tenaflly.
Oct. 16, 1973-----	Dr. Michael Bunnemeyer, Princeton.
Mar. 21, 1972-----	Prudential Management Office, Short Hills Mall.
Feb. 7, 1972-----	Flagstaff Liquors, Perth Amboy.
Jan. 28, 1971-----	Arthur Davis, South Orange; Denville Line Painting Co., Denville.
Aug. 7, 1973-----	American Wilhelmsburger, Orange.
Oct. 5, 1973-----	Madison Township Raceway Park, Englishtown.
Oct. 18, 1973-----	Dr. Milton Hahn, Irvington; Dr. Ambrosio Severino, Parlin; Julian Buckner, Cranford; Data Processing Repair Institute, Scotch Plains.
Jan. 2, 1974-----	Beck & Block, Inc., Clifton.
Jan. 4, 1974-----	Tri J. Corp., North Plainfield.
Jan. 8, 1974-----	Corneliss Roofing, New Providence.
Jan. 8, 1974-----	Business Men's Assurance Corp., East Orange.
Jan. 8, 1974-----	K C L Corp., Union.
Jan. 15, 1974-----	Dittmar Agency, Freehold.
Jan. 16, 1974-----	Bernard Shub Agency, Morristown.
Jan. 16, 1974-----	Kraft Foods, Inc., Hillside.
Jan. 25, 1974-----	Jacobsen & Winter, Edison.
Feb. 12, 1974-----	Kravet Drug, Union.
Feb. 14, 1974-----	Newark Information Bureau, Newark.
Feb. 25, 1974-----	Elizabeth Board of Education, Elizabeth.
Feb. 28, 1974-----	Capitol Landscaping, Orange.
Mar. 1, 1974-----	Dr. Roger Harris, Fort Lee.
Mar. 11, 1974-----	Dr. George Ehrlich, Parsippany.
Mar. 15, 1974-----	E. F. Houghton, Somerville.
Mar. 20, 1974-----	Camp Speers, Eljabar YMCA, Westfield.
Mar. 27, 1974-----	McFarlane Construction, Woodchiff Lake.
April 15, 1974-----	New Jersey Lublication Equipment Co., North Plainfield.
April 22, 1974-----	Hansen Agency, Parsippany.
May 3, 1974-----	Food & Drug Administration, Newark.
May 8, 1974-----	Sophia House of Studies, Father Civisca, Green Brook.

ESSENTIAL COMMUNICATION SYSTEMS, INC.,
Kenilworth, N.J., November 7, 1973.

Mr. PAUL McMAHON, Esq.,
David Berger Associates
Philadelphia, Pa.

DEAR PAUL: Here is an addendum to the list of people who have been harassed by the telephone company:

Nov. 1, 1971-----	Allied Churgin & Sadkin, Irvington, ¹ Tom Barklo, telco, rep.
Aug. 1971-----	Saul Beckerman, Elizabeth (T/A).
Mar. 1973-----	Berkley Heights Board of Education ¹ (our coupler still on loan).
Nov. 1972-----	Courier News, Somerville.

Footnote on p. 2969.

July 5, 1973-----	Drs. Gusick and Arlen, Plainfield.
May 24, 1973-----	Drs. Lynn ¹ Kuhn, Plainfield.
Sept. 1973-----	Lambertville Animal Hospital.
Sept. 1973-----	Dr. Lynch, Mt. Arlington.
Feb. 1973-----	Madison Dog Hospital.
Aug 16, 1971-----	Mahwah Board of Education, Robert Henry, telco rep.
Aug. 1972-----	Midland Glass.
Dec. 1972 & Apr. 24, 1973-----	Dr. Null, Plainfield ¹ D.A. tester Mrs. Antell 885-9900.
Sept. 1971-----	Parsippany Board of Education put in T/A after harassment.
Sept. 1972-----	Joseph Smith Co., Union.
Dec. 15, 1971-----	South Orange Board of Education.
June 1973-----	Bernard Kape, South Plainfield using T/A. Bell claimed line problem on CAP before they knew T/A was involved.
Mar. 1973-----	Capitol Landscaping, Orange, paying for RDI, but doesn't have one, waited 6 days for phone reconnect.

EXHIBIT 3.—*Letter from Irene Spradling Re Problems With Northwestern Bell*

INTERNAL MEDICAL CLINIC, P.C.,
Des Moines, Iowa, February 8, 1974.

Mr. GERALD HELLERMAN,
Special Financial Adviser, Antitrust and Monopoly Subcommittee,
U.S. Senate, Washington, D.C.

DEAR MR. HELLERMAN: It seems many unnecessary problems came up at the time it was the decision of the doctors to change our telephone system from Northwestern Bell to Sound Inc. We didn't receive good repair service from Northwestern Bell and our problems were never solved. They suggested we add additional incoming lines, but our PBX operator couldn't handle our present system.

Mr. Joe Emerson with Sound Inc. talked to me regarding their system and this seems to be the answer to many problems we were encountering. It was the decision of the doctors and myself to use Sound Inc. and Northwestern Bell was notified. A letter was written to Mr. Vogel, Communications Representative of Northwestern Bell. He immediately contacted me asking for an appointment to visit with me. He felt certain we didn't wish to make the change over, we didn't fully understand the system with Sound Inc., in the very near future they could offer us the same system. He asked me to see our contract with Sound Inc. as he knows me personally. He had men higher up to report to. I delayed giving him this information and told Mr. Emerson of the situation. Mr. Emerson suggested I not reveal the figures as this was now between Sound Inc. and Internal Medical Clinic. Mr. Vogel visited me again and I asked him if employees with Northwestern Bell were aware of the fact we were making the change. He said they definitely were not informed. The reason for my question was we received a payment from a patient who wrote us a note, a copy of which is enclosed. He said he would check this out. I did reply to the patient as we made a billing error and she was entitled to the courtesy of a reply. Mr. Vogel also informed me he couldn't guarantee our Clinic would continue to do Northwestern Bell Telephone's physicals. One doctor in our Clinic does physicals for the executive personnel.

There was a delay in making the change-over and Sound Inc. kept Northwestern Bell informed. At the time of the cut-off deadline, September 28, 1973, Northwestern Bell informed us they would cut the lines at 3:00 p.m. Our Clinic is very busy during this peak hour. I requested they wait until 5:30 p.m. at which time we would go on Answering Service. They were very

¹ We have conversation on DictaBelt.

ANTI-HARRASSMENT DISCRIMINATORY PRACTICES

A.F.T.E. 14E. Park St., Newark 642-5048 No RDL.
Allied Chemical, Morris Township (Denison Unit) No RDL.
U.F.T.E. 14 E. Park St., Newark.

RDL PROBLEMS

J. M. Towne Co., Caldwell.

discourteous but finally agreed to my request. Sound Inc. represented by the crew, including Mr. Emerson and Northwestern Bell with their crew and Mr. Vogel met in our basement around 3:30 and the change was completed around 6:00 p.m.

I feel Northwestern Bell was unfair, discourteous and totally out of line with Internal Medical Clinic. We are very happy with our new system. We receive service within 2 hours after calling: Northwestern Bell promised us 24 hour service. Telephones can be answered from different locations, we have a paging system, push buttons and many other advantages which Northwestern Bell never could offer us. We are treated very courteous by Sound Inc. and with additional phones, flexibility, etc. we receive this at a lower cost.

We are thankful Northwestern Bell finally has competition. Enclosed are letters which may be of interest.

Respectfully,

IRENE SPRADLING,
Business Manager.

EXHIBIT 4.—CWA Union Publication

[Local 700, CWA, vol. 14, issue 1, January 1973]

PRESIDENT'S VIEWS

(By Jim Crews)

Since our last paper we have lost two good friends due to death, Larry Sievert a member of our local, and Jim West, Administrative Assistant to Jim Gordon.

I would like thank all the members, stewards, and officers who worked so hard in the past year to help make the local grow and become a better local. We gained 108 new members in the past year. This could not have been done if it wasn't for your hard work. Let's try a little harder in 1973 to get as good or even better results.

In this new year you could help yourself, the company, and the union by the following items:

1. When sick, call in yourself.
2. When late, call in (if your car will not start, call in and then try some more.
3. Get your doctor to return all medical forms.

If your supervisors are not introducing the new employees to your stewards, please notify your chief steward.

In this new year, let us all work together to make our union and job a place to be proud of.

Thank you.

Words cannot express well enough our sincere appreciation for the effort put forth by the Union, Management, and all telephone employees to help raise the money for Rebecca and me.

We also want to thank each and everyone for the many cards, memorials and flowers sent to us at the time of our great loss; and also for the many visits and cards Larry had while in the hospital. We would also like to thank the blood bank and the fellows who helped move Larry from Methodist Hospital to Clarkson Hospital.

Thank you, to everyone who helped in any way. Your thoughtfulness, concern, and prayers will always be remembered.

MRS. LARRY DEAN SIEVERT AND REBECCA LYNN,
MR. AND MRS. DEAN SIEVERT, LLOYD, LEON, AND LINDA.
EDITOR'S EYE

(By Denny Humphrey)

DON'T BITE THE HAND THAT FEEDS YOU

Daniel Webster defines competition as the efforts of two or more parties to secure the business of a third party.

Until recently in Northwestern Bell, and especially in the Nebraska area, competition has never been a serious consideration. Suddenly the situation

has haken an abrupt turn around. The effects are being most severely felt in the Omaha vicinity. Competition is making rapid advances on several businesses in the PBX and Key System Services, which were traditionally served by the Bell System.

Even though a concerted effort is being made in each and every instance to prevent any business from being lost to the competition, several of these attempts have been successful. Each account lost to the competition is a loss of revenue to Ma Bell. Remember friends, Ma Bell is the lady who pays us. With the signing of a new contract just a year away, it would do us well to give this new problem some strong consideration.

Because a firm decides to change its communications systems to that of the competition, it does not necessarily mean that the competition has a better product of offer. In many instances it is a mere illusion that money can be saved on a large scale, along with a few somewhat shakey arguments supporting a pride of ownership theory. Whatever the reasons, the fact remains that these are bucks lost by Bell. Bucks that cannot be spent on her employees. Remember, you can't get blood out of a turnip. If the money isn't there, it cannot be negotiated for.

Let us keep a few elementary thoughts in mind. First, the competition does not offer a free product. Their equipment also costs money. Each business, not matter what type of telephone equipment it uses, depends on the money it gets from its customers to operate, and pay the bills.

Below is a list of those businesses that have already bought systems from the competition. Along with these are at least twice as many firms which at this time have competitive cases pending.

Johnny Baxter Plymouth, Westroads Volkswagen, Sample Hart Ford, Rosen Novak Chevrolet and Cadillac, Missouri Valley Machinery, Dewey Smith Chevrolet, Paramount Furniture, Ben Franklin Motel, and Royal Inn.

EXHIBIT 5—*Minutes of CWA Local (Des Moines, Iowa) Meeting of
October 11, 1973*

Local Meeting October 11, 1973: Meeting was called to order by Pres. Kleywegt at 8:00 p.m., all officers and chief stewards were presnt.

U. C. Co-chairman Bob Green reported a successful drive at the Company with \$161,695.00 turned over to the Greater DM UC and \$2,000.00 to the Indianaola UC.

Chief Steward Reports: *Affiliated Towns*: . . . CS Lamb reported all quiet *Directory* . . . CS Dahleen reported there were only 10 people left in the production units of the Directory Dept. *Engineering* . . . CS Simmons reported on the CWA Week-long School she attended and the Democratic Telethon and thanked all who worked the Telethon. *Traffic* . . . C. Kinney reported minor problems with the T&P Plan. *Outside Plan* . . . CS White reported the Company had met it's affirmative action goals in outside-plant. *Inside Plant* . . . CS reported they now had 2 nonmembers and a problem with overtime in the West Office. *Diamond Lab* . . . CS Uherka reported negotiations were over and the contract ratified, and this two year contract had major changes in their grievance procedure. *Accounting* . . . CS Ostrander reported on the problems with those units being absorbed due to the CRB conversion. *Commercial* . . . CS Young reported on the problems with open lines for Company contact. *Marketing* . . . CS Payton reported there was an opening for a TSR in the Local Sales section. He also read a list of Des Moines who had converted to their own telephone systems resulting in a loss of \$31,000 annually. (Firms are: Hotel Ft. Des Moines, Triple F Feeds, Cadco Feeds, Grodt-McKay Realty, Andrew Realty, Chet Elson Insurance, Internal Medical Clinic and RPW Inc-Magneto Carburator.)

The Sept Local Meeting minutes, the September financial statement and year end statement were reviewed and accepted as printed. The Board recommendations were approved. Pres. Kleywegt reported on the Blood Bank Drive which resulted in the donation of 110 pints.

Committee Reports: *Legislative* . . . Pres. Kleywegt thanked all the members who worked at the Democratic Telethon. *Education* . . . 2nd VP Boggs ann. there would be a steward school Nov. 2nd and 3rd. *Organizing* . . . Pres. Kleywegt reported the Local 90.7% organized with 67 new members during

Sept. He also read a letter of thanks he sent to Dorothy Smith, Traffic steward, for signing 10 non-members in Sept.

Old Business: VP Belken reported on the retirement party held in honor of June McDonald. NEW BUSINESS: Pres. Kleywegt reminded everyone of the Oct. 31st special meeting. 1st VP Belken reminded everyone of the Oct. 23rd primary in the city election and urged everyone to vote and again in the general election Nov. 6th. Being no further business the meeting adjourned at 8:52 p.m.

Respectfully submitted,

MARIAN MOFFITT,
Secretary-Treasurer.

BOARD RECOMMENDATIONS

(1) The Board recommends donating \$50.00 to the United Rubber Workers Local 164, who have been on strike for 7 weeks. (10-17-73)

EXHIBIT 6.—*Contract Clauses Indicating Ability of Company to Remove Material From Bulletin Board*

AGREEMENT BETWEEN COMMUNICATIONS WORKERS OF AMERICA AND SOUTHERN BELL TELEPHONE AND TELEGRAPH CO.

Effective July 18, 1971

17.02 Bulletin Boards.

A. The Union shall be permitted adequate space to place bulletin boards on Company property.

B. Union bulletin boards shall conform with those in use by the Company when in adjacent locations and when not in adjacent location, they shall conform with the character of the quarters in which they are located.

C. The number, type and location of Union bulletin boards shall be satisfactory to the particular District Plant Manager of the Company.

D. All Union bulletin boards shall be plainly designated as Union bulletin boards.

E. Union bulletin boards shall be furnished, installed and maintained by the Union without cost to the Company.

F. Union bulletin boards shall be confined to use by the Union for such matters as announcements of Union meeting, social functions, nominations and election of Union officers, information bulletins containing only factual reports of the progress or results of Union-Management negotiations, and such other matters as may properly be considered as non-controversial and not derogatory of the Company or its personnel.

GENERAL AGREEMENT BETWEEN NORTHWESTERN BELL TELEPHONE CO. AND COMMUNICATIONS WORKERS OF AMERICA

Dated July 18, 1971

PART 26. BULLETIN BOARDS ON COMPANY PREMISES

261. The Union shall have the right to mount bulletin boards at its own expense at each office or plant location. The location, number and construction of such bulletin boards, however, shall be subject to the approval of the Company. The use of such bulletin boards shall be considered proper when confined to factual notices and announcements of the Union, such as:

- a. Meetings;
- b. Nominations and elections of Union officers;
- c. Results of Union elections;
- d. Appointments to Union offices and committees;
- e. Social or recreational affairs;
- f. Agreements made between the Union and the Company;
- g. Joint announcements or letters issued by the Union and the Company; or
- h. Bargaining progress reports.

262. Material to be posted shall not contain anything of a controversial or political nature, anything derogatory to the Company or employees, or anything that will detrimentally affect telephone service. If the Company objects to any posted material, the Union shall remove the objectionable material immediately.

of amendments
Procedure and
as effective
will be
the Union
procedure will
our plan to
of these
be given to
the next
to complete

NOTICE!!

Do not shop at these
stores - They do not have
Southern Bell Equipment:

Holiday Inn South - Victory Drive
Hughes Motor Company
Columbus Interstate Insurance
White's Book Store
Jefferson-Dykes Realty Company
Kearl's GMC Trucks
Wellborn & Company Seban Inc.
Barrington Motor Co. Brady Center
Brady Center

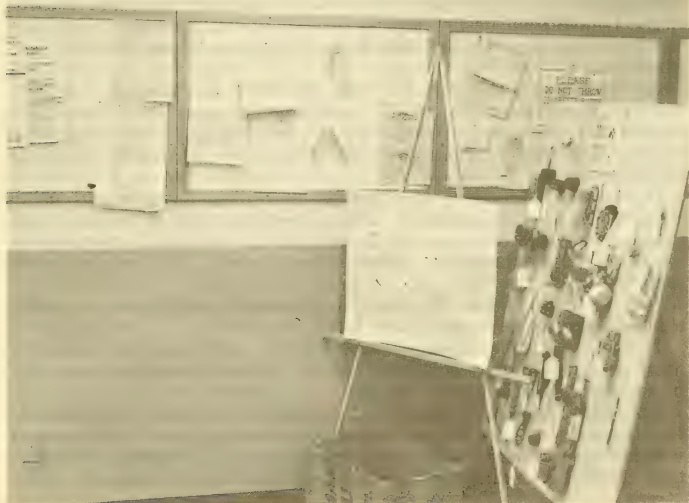


EXHIBIT 7.—Transcript of tape recorded telephone message which CWA Local 1170 was putting out on January 9, 1974—telephone number (716) 458-7800

The union has asked the company to reopen the contract and take a look at the reimbursement of mileage. The present contract calls for 11¢ a mile for mileage for employees using their private automobiles on company business. With the energy crisis and the cost of gas going up, those employees using their autos on company business must have an increase in reimbursement for mileage. Remember, every time a customer goes interconnect, that is one less telephone for the employees represented by Local 1170 to work on. Call the interconnect hot line, 921-6620; feed them the information so the company can follow up. The interconnect hot line only had six calls from the Craft in 1973. Let's use the hot line, 921-6620. The Holiday Inn on Ridge Road West went interconnect last week. No more parties or meetings at the Holiday Inn West; let the interconnect company have them. This is Local 1170, CWA, thanking you for calling the tape to get the facts and, remember, let's get ready for 1974."

Senator HART. Our next witness is C. M. Huntley, director of telecommunications, Continental Airlines, Inc.

I should state for the record that Mr. Huntley appears here at the request of—at the specific request of—the subcommittee. His testimony is in response to that request.

STATEMENT OF C. M. HUNTLEY, DIRECTOR, TELECOMMUNICATIONS, CONTINENTAL AIRLINES, INC.

Mr. HUNTLEY. Thank you, Mr. Chairman.

We have been requested by Senator Philip Hart, chairman of the subcommittee, to furnish information pertaining to the activities of Continental Airlines in the development of telecommunications as it affects our operations in the airline industry. As director of telecommunications for Continental Airlines, the whole subject of telecommunications falls within my area of responsibility, and accordingly I have been designated to furnish the information requested. We hope that it will prove helpful to the subcommittee in its deliberations.

At Continental Airlines we view the telecommunications department as a service organization, applying management science techniques and engineering technology to planning and developing optimally cost-effective communications systems responsive to corporate objectives.

Our overall objectives may further be broken down to:

(1) Providing increased communications dollar effectiveness through the application of advanced systems technology required to meet the over-expanding corporate requirement for telecommunications; and

(2) The application of system management techniques to control this advanced technology.

Particularly, telecommunications in the air transport industry must serve to improve customer service; reduce operating costs; and increase revenue.

I should like to digress for a moment and explain my personal background in telecommunications engineering and management which comprises some 17 years experience in the planning, installation, training, maintenance, and operation of high-density mili-

tary, municipal, and corporate communications systems. My professional experience prior to joining Continental Airlines in April 1970 includes:

(1) ARINC Research Corp., a subsidiary of Aeronautical Radio, Inc., 2½ years as senior member of the technical staff;

(2) Page Communications Engineers, 6 years in various capacities, including senior technical representative, data engineer, system engineer, and chief engineer, field service, Pacific;

(3) ITT World Communications/Mackey Radio & Telegraph, 5½ years in the area of high frequency commercial communications; and

(4) Boeing Airplane Co., 2 years in various technical capacities.

My educational background consists of a bachelor of science-electrical engineering degree received from the University of Hawaii, with additional graduate level studies in the areas of physics and mathematics; correspondence studies with the Capital Radio Engineering Institute and the Alexander Hamilton Business Institute; and a number of military-sponsored communications courses. I hold both FCC radio-telegraph and radio-telephone licenses together with having been an active licensed amateur radio operator for 23 years. I received my first FCC licenses, commercial and amateur, in 1951 at the age of 13.

In my capacity as director of telecommunications for Continental Airlines, I am directly responsible for the planning, development, installation, and operations of all ground communications functions. Specifically, I conduct engineering analyses to estimate communications requirements, coordinate these requirements with suppliers and common carriers, and negotiate contracts for ground communications services.

I regularly review these communications services to insure that the quality received complies with contractual obligations.

I maintain at all times close liaison with the appropriate common carriers and system suppliers to insure that appropriate technology is available to meet the telecommunications requirements of Continental Airlines. In addition, I serve on several air transport industry and telecommunications management committees which review, determine, and promulgate technical and management policy. Currently I am the 1974 chairman of the Airline Coordinating Committee for Telecommunications Service—ACCTS—the company-assigned alternate representative of the Airline Communications Administrative Council—ALCAC—and the corporate-designated representative of the Tele-Communications Association—TCA.

In addition to these activities I am frequently invited to make public presentations regarding Continental Airlines' development activities and, in particular, those activities which might be the subject of joint industry development.

Telecommunications management is certainly no different from any other resource-constrained corporate activity. It's necessary to concentrate one's limited time and effort to managing those functions which have the most significant impact on the allocation of corporate resources. In past years Continental Airlines has concentrated its telecommunications efforts toward the management and

improvement of our on-line data systems, specifically our real-time reservations and message-switching system. By making appropriate capital investments in customer-owned equipment, and with the application of network management techniques, we have been able to make significant inroads in reducing our recurring operating costs measured on a year-to-year basis. As a matter of financial policy, Continental Airlines prefers to own its basic operating equipment rather than to lease it.

Extensive cost analyses conducted in the latter part of 1971 indicated that in terms of overall telecommunications dollar expenditures at Continental Airlines, we spent something on the order of 87 percent for telephone services and approximately 11 percent for data services. Upon further analysis it became apparent that little of the advanced technology which had been applied to the data communications system problems had yet been applied to corporate telephone systems.

In other words, we had been devoting our limited staff time to a relatively unfruitful area while ignoring the potentially more profitable areas. All of the technology was available—it simply had not been applied.

During this interval Continental Airlines had maintained liaison with the Airline Coordinating Committee for Telecommunications Service, a group of airline technical and management personnel organized to develop and promulgate policy concerning air transport industry telecommunications technology and management. In this capacity Continental Airlines participated in several interrelated committee projects leading to the concept of improved corporate telephone systems and, particularly, automatic call distribution systems—ACDS.

Continental Airlines participated in ACCTS committee discussions which led to a request of the A.T. & T. representative in late 1971 that the committee be updated regarding the Bell System development plans pertaining to more sophisticated and cost-effective automatic call distribution systems. A report was subsequently received from the A.T. & T. representative on April 19, 1972, to the effect that, "A decision regarding new generation automatic call distribution system units would not be made before 1975 and, if affirmative, units would not be available until 1980."

In addition to these committee activities, Continental Airlines frequently entertains informal technical discussions with various equipment vendors and suppliers. It was from this type of discussion held in early 1972 with personnel of Collins Radio Co. that the concept of a time division multiplexed pulse code modulation, integrated telecommunications switching system first evolved. In an engineering discussion with Collins Radio personnel, it became apparent that a then-current Collins internal research and development program regarding a prototype time division multiplexed telephone switch could indeed be modified to meet the requirements of Continental Airlines.

Continental Airlines had four conceptual applications for this prototype switch:

(1) An application as an automatic call distribution system to replace the currently used Bell System electromechanical switching system used to receive incoming reservations telephone calls and distribute these calls to a group of skilled reservations agents within a large reservations office.

(2) An electronic private automatic branch exchange application which would be used to control all in/out telephone calling patterns at a network node.

(3) A dial tandem switch application wherein the same switch could be used to control all in/out telephone calls on the private-line network node.

(4) An unmanned telephone call concentrator application wherein the switch could be used as a statistical concentrator at certain geographical locations in order to reduce line-haul trunking charges.

Based upon these applications, Continental Airlines and Collins Radio personnel continued to definitively discuss system technical details and cost structures.

On April 14, 1972, the telecommunications department at Continental Airlines submitted for the review of corporate management an initial system concept pertaining to a newly designed customer-owned automatic all distribution system—ACDS—as shown in attachment C.

[Attachment C appears in exhibit 1 at the end of Mr. Huntley's oral testimony.]

Mr. HUNTLEY. Further, this system was proposed as a digital telephone switch and would include ancillary equipment such as agent positions and statistical collection capabilities. This development program was specifically organized to replace the then-currently planned installation of two Bell System model 3A electromechanical ACDS at our Los Angeles reservation office scheduled for May 1, 1973. We conducted an initial feasibility study with the assistance of a system architect, ARINC Research Corp. The purpose of this study was to answer three questions: (1) Whether it was technically possible to implement an ACDS with existing equipment; (2) whether it was economically attractive to install a new system; and (3) whether a new system could be successfully placed in operation in a required time frame?

The internal project was completed on July 10, 1972, with the following answers:

(1) The proposed ACDS was technically feasible, but there were no off-the-shelf systems presently available. All system components, with the single exception of the switching matrix, were currently available and could be assembled into a working system with minimum effort.

(2) The system was economically attractive to implement. When Bell System lease costs versus customer-owned costs were compared, without consideration of any further savings, the cost break-even point was approximately 4 years.

(3) Because of development variables, the initial system could not be developed in time to meet the then-required date for the planned Bell System installation; that is, May 1, 1973.

A recommendation was made to corporate management that we proceed with the system architect to develop a firm request for proposals for subsequent release to system vendors. This internal project was approved by corporate management on September 1, 1972, and completed on September 20, 1972.

A firm request for proposals was submitted to numerous system vendors on November 15, 1972. The prospective bidders list is included as attachment D.

[See exhibit 1 at the end of Mr. Huntley's oral testimony.]

Mr. HUNTLEY. A further internal project was then approved by corporate management on November 22, 1972, to allow:

(a) Formation of evaluation and scoring criteria, along with vendor contact for clarification of technical details regarding the request for proposals; and

(b) Eventual recommendation for selection of the most cost-effective vendor proposal.

Again this study effort was conducted with the assistance of the system architect and was completed in April 1973 with a vendor selection made in favor of Collins Radio Co. The one step remaining in the system architecture process was that of a life-cycle financial analysis and this study was authorized by corporate management in February 1973 and completed in May 1973. ARINC Research Corp. again assisted in a study of all feasible cost aspects of a customer-owned system leading to the conclusion that over the projected 8-year system life cycle, the procurement of such a system would have a maximum break-even point of 8 years, when considering only equipment and directly related costs.

In other words, Continental Airlines could pay for this system totally in a period of 8 years. When considering other more significant potential savings, including operating personnel, supervisory personnel, telephone trucks, and lost-call revenue, the system could potentially return savings and revenue to Continental Airlines in excess of \$15 million. In other words, by investing corporate funds on the order of \$600,000 Continental Airlines could conceivably pay off the equipment in 3½ months, and certainly not in excess of 8 years.

The cumulation of these studies conducted over a 14-month period led to a recommendation that Continental Airlines develop, procure, and install a digital telephone switching system at Houston, Tex.

The procurement contract was signed on July 31, 1973, with Collins Radio Co. and joint development activities were conducted through April 4, 1974, when system installation began. The system was completely installed and cutover on April 24, 1974. Experience to date has indicated that the system has met virtually every measurable criteria.

Perhaps the most exciting part of this program for me, personally, was the courageous response of Continental Airlines' management to my proposal to engage in an engineering development program which, happily, has led to an exciting new marketing system which uses state-of-the-art technology to improve Continental Airlines' efficiency and reduce its costs of operation.

Thank you.

Senator HART. Thank you, Mr. Huntley.

As you undoubtedly know, yesterday we had testimony from a travel bureau agent that a Southwest Bell employee instructed her—the travel agent—not to book Continental, not to sell tickets on Continental unless there was some identifiable inconvenience that would be caused the traveler by putting the traveler on another carrier. This instruction related to travelers who came in and out of Houston in connection with telephone company meetings. She told us further that this instruction was given to her because Continental did install its own communications system, as you have related.

The decision to have Continental's communications system installed by Collins, resulted, according to her, in a direction from the Bell Co. that Continental's service not be used except under limited circumstances.

Were you aware of this?

Mr. HUNTLEY. We were not definitely aware of that, Mr. Chairman, until such time as the testimony yesterday, and it was brought to our attention by the staff members. We had heard rumors. We had made a cursory investigation. We had not found any definite indication that that was true until we heard the testimony yesterday.

Senator HART. Have you heard rumors of any other economic sanctions that Southwest Bell may have applied to Continental?

Mr. HUNTLEY. No, sir.

Senator HART. None?

Mr. HUNTLEY. None, to the best of our knowledge.

Senator HART. Well, what is your reaction now that you have had this confirmation of the rumor?

Mr. HUNTLEY. My reaction in this type of a matter would lie in the hands of the sales and service department, Mr. Chairman. It is totally outside of my prerogatives as a technician within Continental Airlines. I would have to say my reaction is one of—somewhat of—surprise; and that according to the statements made yesterday the direction was made at a low-level supervision within Southwestern Bell. I do not believe that to be the policy of Southwestern Bell. I think that was perhaps an unfortunate statement made by a low-level supervisor.

Again, this is outside the prerogative of my department, but I do not believe that to be the policy of Southwestern Bell.

Senator HART. If it was the general policy of Southwestern Bell what effect would that have on your decision to install additional communication systems in cities other than in Houston?

Mr. HUNTLEY. I would have to say that the final decision would lie within the sales and service department. As a technician, completing technical and cost studies, it would not impact on my decision whatsoever.

Senator HART. Would I be correct in assuming that Continental's decision as to whether to install other systems could pretty much be summarized in this way:

The first line would show the savings to Continental that you and your technicians identify as flowing from the installation of the new system; and the next line would be estimated loss of revenue if the Bell policy, in fact, was as she described it; and the difference would determine what to do. Is that the way you run a business?

Mr. HUNTLEY. I could not answer truthfully whether that type of an analysis would be conducted in Continental Airlines. It was not conducted in the installation of the Houston system. I would turn that matter over to our sales and service department.

Senator HART. All right. This is in your field. You understand the technology now in use in corporate communications.

Do you have an understanding of how that compares with the communications systems in the military, for example? Is there a fair level of comparison, or is the military vastly superior, or—as some of its critics assume—probably behind you people even in communications?

Mr. HUNTLEY. There has been a statement made previously by myself that corporate communications technology tends to lag defense-space communications technology by as much as 20 years.

Senator HART. As much as what?

Mr. HUNTLEY. Twenty years. That is not uncommon knowledge.

I would hasten to add an explanatory comment on that. It is that technical innovation, if you will, is not necessarily a valid reason for a corporate commitment. There are many reasons for making an advance in technology. There are many reasons why that lag exists.

On the other hand, there are many cases in corporate communications activities where there is a definite need for an improved technology. There is no question about that. None whatsoever.

Senator HART. In your public statement about this, did you intend to be critical of the technology in the nonmilitary field, the corporate field?

Mr. HUNTLEY. I would have to ask you to define the word critical, Mr. Chairman.

Senator HART. I guess what I am saying is were you making a speech that said if those fellows can do it so much better than we are doing it, what is wrong with us?

Mr. HUNTLEY. I don't really believe that to be the total context. My job at Continental Airlines is to be constantly critical of applied technology.

Again, as a matter of public record, I have often sponsored joint development activities between vendors, the airport members, the common carriers, and the specialized common carriers.

I don't view the system development to be an individual item. It must be conducted in concert with several members.

Senator HART. Senator Hruska?

Senator HRUSKA. I have no questions. Thank you very much for your testimony.

Senator HART. Mr. O'Leary?

Mr. O'LEARY. Mr. Huntley, would you try and describe to us in layman's language what Continental's system in Houston does that the previous Southwestern Bell System didn't do?

Mr. HUNTLEY. Well, that is a large subject to cover in a couple of words.

There have been tremendous advances in telephone systems within the past few years, such as better management information over the attended positions, and better management out of your in-and-out trunking by having a better visibility over the call patterns.

One of the major advantages of the system in Houston has to be better management visibility of our operating system at any given point in time, from which derives substantial operating benefits and economies.

Mr. O'LEARY. When you say better management, can you give us an illustration of what the system does in that regard?

Mr. HUNTLEY. Yes. By being able to measure incoming and outgoing calls on an instantaneous basis and developing statistics over 15-minute or a half-hour increment, or an 8-hour increment, we can better staff in response to our customers' requirements. We can better trunk, vary the trunking levels, based upon our customers' calling habits.

This then results, obviously, in operating economies if we take advantage of those statistics.

Mr. O'LEARY. You have been able to find out at what times of the day you get a lot of calls with respect to people wanting to go on Continental Airlines?

Mr. HUNTLEY. We constantly measure the number of incoming calls, the length of time it takes to handle those calls, the method by which they are distributed around the office, to which positions; and we staff and we adjust our trunking accordingly: seasonally, monthly, and in the case of personnel on a daily and hourly basis.

Mr. O'LEARY. When you had the previous system with Southwestern Bell did you have access to this kind of information?

Mr. HUNTLEY. To a limited extent. We used the facility provided by Southwestern Bell in conjunction with the electrical-mechanical information to gain similar information. However, it was not totally adequate for all of our needs.

I might hasten to add that there have been significant developments in these areas within the past several years. The foremost of those is the jointly developed system by Collins and Continental Airlines.

Mr. O'LEARY. Well, let's say I am in Houston and I want to take a flight on Continental. I put a call in to your office. What happens?

Mr. HUNTLEY. Well, that call comes in on a bank of trunks, Mr. O'Leary, to our machine in Houston, and then, depending upon the availability of a given agent within a given operating group, the call is switched to that agent.

If all agents within that particular group are busy, it will hunt for an available agent at another group, dependent upon internally established hierarchies of incoming calls.

All statistics pertaining to the incoming call are measured along the time by the computer. The time of the arrival, the length of time it took to handle the call, where the call was ultimately answered, by whom; virtually every meaningful statistic is measured.

Mr. O'LEARY. Now, I noted on page 1 you listed three things that communications in the air transport industry must do. The first was improve customer services.

Is it basically the access to this kind of information which allows you to better use your resources which improves customer service, or is there something else?

Mr. HUNTLEY. That is a good statement. We use technology to respond to our customer requirements. In this particular case,

improved answering service by our attendance of the incoming reservations calls.

Mr. O'LEARY. You then go on to the two additional factors: namely, reduce operating costs and increase revenue. Can you describe for us how the system does achieve those two goals?

Mr. HUNTLEY. In terms of reduced operating costs, again it is a matter of Continental's financial policy to own rather than lease equipment.

We have a direct reduction in measuring the cost of the previous leased equipment versus the acquisition cost. We have other economies which derive through improved trunking and improved staffing.

The increase in revenue I have referred to, I think, is obvious in that it derives from the amount of calls that a given number of attendants can handle.

If we can improve the efficiencies of these attendants, then those attendants can handle more calls; and thus bring in more revenue to Continental Airlines.

Mr. O'LEARY. The system allows you to determine your staff needs at a given time during the day, is that correct?

Mr. HUNTLEY. Yes, sir.

Mr. O'LEARY. What about the improvements that you get from the system by virtue of trunking? Would you explain that for those of us who are not communications experts?

You have many trunks coming into this?

Mr. HUNTLEY. Approximately 100—it varies seasonally. Anywhere from 120 to 140 incoming trunks at any period of time in the Houston machine. By having instantaneous access to real time information, and the accumulation of that information over a period of time, allows us to trunk accordingly. We can trend this information and forecast the required trunks that we will need for a future week or future month. We then order our facilities accordingly on a month-to-month basis.

Mr. O'LEARY. And you lease those trunks from the Bell System?

Mr. HUNTLEY. From Southwestern Bell and from A.T. & T.; yes.

Mr. O'LEARY. Right.

Now after you installed your system, did you find that you previously had more trunks than you needed?

Mr. HUNTLEY. The management visibility provided by the systems lets us manage our trunks more effectively; and, therefore, at any given point in time, we will need less trunks for a commensurate load in that sense. Yes; we would require less trunks, but in that sense only.

Mr. O'LEARY. And the amount that you pay to Southwestern Bell, and A.T. & T. varies with respect to the number of trunks you lease?

Mr. HUNTLEY. Yes, sir.

Mr. O'LEARY. On page 8 of your statement you indicate that the system in Houston could potentially return savings in revenue to Continental Airlines in excess of \$15 million. Let me see if I have got that correct. Are you estimating that over a period of 8 years you may save \$15 million?

Mr. HUNTLEY. That's correct.

Not save in the context we are measuring against a particular previous installation. The \$15 million is an accumulation of savings and revenue where those savings accrue from equipment, personnel, supervisory personnel, trunking, and many others. We did an 8-year, life-cycle financial analysis, and contained within that 8 years was a parametric analysis based upon the percent wisdom of our analysis, if you will. In other words, if you assume we are 100 percent correct, we will indeed save slightly in excess of \$15 million. We then did a parametric analysis of a 90 percent, 80 percent, 70 percent, all the way down to, I believe, approximately 40 percent.

Mr. O'LEARY. How did you arrive at the 8-year period? Is that the period over which you depreciate this equipment?

Mr. HUNTLEY. Standard corporate policies within Continental use a period of 5 to 8 years for computer-type equipment. While this is not a computer system per se, our financial people act accordingly in assigning an 8-year depreciation cycle for this equipment. Therefore, we use an 8-year period.

Mr. O'LEARY. I think you indicated on that same page that the investment in this system was in the neighborhood of \$600,000, is that correct?

Mr. HUNTLEY. Yes; we have, since that time, added several additional options. That is an approximate number; yes.

Mr. O'LEARY. A potential savings of \$15 million compared to an investment of \$600,000 seems staggering. Has your experience with the system thus far borne out that estimated savings?

Mr. HUNTLEY. We have every indication that it will, Mr. O'Leary. The system has now been on line for approximately 2 months; and undergoing the final shakeout, if you will, that every newly installed system does. We have every reason to believe that we will accrue those economies and increased revenue.

Mr. O'LEARY. All right.

Now if you achieve anywhere near the estimated savings which you have indicated, does that mean you are going to attempt to install additional systems in other cities?

Mr. HUNTLEY. Yes.

Mr. O'LEARY. Approximately how many additional systems are we talking about?

Mr. HUNTLEY. It is likely we will install up to five additional systems within the next 3 years, dependent upon the logistics of the situation, the time required to procure and install the equipment.

Conceivably more than that, for some of our other corporate business ventures.

Mr. O'LEARY. Can you estimate how much revenue Southwestern Bell is losing as a result of the installation of your system in Houston? You estimate that you may save as much as \$15 million over 8 years. How much in the way of revenue are they losing because of your system?

Mr. HUNTLEY. Between \$5,500 and \$6,000 per month for direct equipment which was removed.

Mr. O'LEARY. Let me ask one further question. You indicate that your system allows you to get better use out of the trunks which you

lease on a monthly basis from the Bell System and allows you to estimate, with some degree of accuracy, how many trunks you will need in a given month, is that correct?

Mr. HUNTLEY. That's correct.

Mr. O'LEARY. How many trunks did you previously lease from the Bell System when you didn't have access to this information in comparison, say, to a month where you don't need a great number of trunks now?

Mr. HUNTLEY. Our level of trunking at Houston varies between 115 to 120 trunks in a low month to as high as 140 in a peak month.

Mr. O'LEARY. Before you had this system how many trunks did you lease that you didn't, in fact, need?

Mr. HUNTLEY. That is a rhetorical question that can't be answered in history, in effect. We expect to achieve somewhere on the order of a 5-percent reduction in trunking costs in the Houston machine; between 5 and 10 percent. It is extremely difficult to say at any given point in time where that trunk is going to fall, in what trunk group. That is what we use the statistics to determine.

Mr. O'LEARY. Mr. Chairman, I have no further questions, but I believe my colleague, Mr. Hellerman, does.

Senator HART. Mr. Hellerman?

Mr. HELLERMAN. Thank you, Mr. Chairman. Mr. Huntley, since we are talking about trunks, what did you find out about the quality or the condition of the trunks supplied by Bell when you installed your equipment in Houston? Were they in working condition?

Mr. HUNTLEY. It's long been a matter of opinion by most bulk users that within a given concentration of trunking, perhaps as much as 10 percent of those trunks are defective at any given point in time.

Mr. HELLERMAN. In your particular case, what did you find out as to the trunks?

Mr. HUNTLEY. We found approximately 20 percent of our trunks were bad.

Mr. HELLERMAN. Could you have found that out before you had installed your own telephone equipment? Was any provision available to you?

Mr. HUNTLEY. No, sir.

Mr. HELLERMAN. In your opinion, does the Bell System have the present ability to furnish you with equipment that you required and installed in Houston; could they install it next week or in the next 2 weeks?

Mr. HUNTLEY. No, sir.

Mr. HELLERMAN. Could they install it in a year?

Mr. HUNTLEY. No, sir.

Mr. HELLERMAN. You are, of course, familiar with the *Carterfone* decision. Could you comment on what the result of that decision has been, as far as you see it?

Mr. HUNTLEY. It has put the prerogative of configuration management at the hands of the communications manager; that is to say, he can begin to manage his assets using Bell System facilities where they are indeed cost effective. I would hasten to add to that that is most areas. Yet, he can exercise his option to use other facilities where there are reasons for doing so.

Mr. HELLERMAN. Are you finding better quality equipment available since the *Carterfone* decision?

Mr. HUNTLEY. From the Bell System?

Mr. HELLERMAN. No; in the marketplace.

Mr. HUNTLEY. We are finding better quality and increased flexibility of equipment coming from all suppliers and common carriers as a result of the *Carterfone* decision.

Mr. HELLERMAN. Much has been written by A.T. & T. and others of the fact that Bell personnel invented the transistor. There also has been much discussion about introduction of new equipment innovations. What is your personal opinion—your personal opinion, other than Continental—as to Western Electric with respect to innovations and technology advancements introduced in the recent past by the Bell System in the communications industry?

Mr. HUNTLEY. That is a hard question.

I would have to answer that question by saying that I certainly don't have access to all known facets upon which to make an intelligent observation. I would say the basic responsibility of a common carrier is to serve the general public interest and not necessarily the bulk user.

With that statement in context, the bulk user is sometimes in a position to exercise other prerogatives.

Mr. HELLERMAN. Could you explain what you mean by other prerogatives?

Mr. HUNTLEY. By designing and developing, purchasing customer-owned equipment.

Mr. HELLERMAN. Well, going back to the transistor, is it your belief that it was introduced to the public in equipment of the Bell System first? Or that it was introduced by other manufacturers?

Mr. HUNTLEY. The transistor was developed by Bell Laboratories specifically for telephone applications. That is a matter of record.

Commensurate with the placing of those concepts in Bell System communication equipment, there were other commercial activities using the transistor.

Mr. HELLERMAN. But was it other companies that introduced transistor equipment which was sold in the communications market?

Mr. HUNTLEY. Would you restate that question?

Mr. HELLERMAN. Bell developed the transistor. Who first offered equipment which had transistors in it in the communications industry? Who introduced it first? Was it the Bell System or non-Bell companies?

Mr. HUNTLEY. The first commercial application of the transistor?

Mr. HELLERMAN. In communications equipment.

Mr. HUNTLEY. How would you define the word commercial, Mr. Hellerman?

Mr. HELLERMAN. Well, communications equipment.

Mr. HUNTLEY. The first commercial application of the transistor was by the Bell System; but that commercial application was not available to the buying public.

It was not necessary at that time to be available to the buying public.

Senator HART. You left me on that.

What does that mean? As I get it, transistors for communications use were developed by Bell; and then the next question is who sold them?

Mr. HELLERMAN. Who introduced them?

Senator HART. You say that Bell introduced them commercially, but didn't make them available to anyone else because it was not needed. Clear that up.

Mr. HUNTLEY. At that time the common carriers were not in a position where they could offer that equipment as such, in the context that customer-owned equipment is now provided. The Bell System certainly provided the transistor in many types of equipment under their tariff situation; which was the mode in which they were operating at that time. So in that sense, the Bell System made the first commercial communications application. There is simply no question about that.

Mr. CHUMBRIS. If I may inject, Mr. Chairman, I think the testimony of our previous hearings, especially the July 30, 31, and August 1 and 2, 1973, was the fact that, as you stated, Bell Labs were the ones who came up with the transistor.

As I understand the record, not only did they come up with the transistor but they made the transistor available to everyone; and then others would take—and once they had the use of it, others made certain refinements. As the years progressed probably company A may have made a refinement on the Bell System's product; and then the Bell System may have made an additional refinement. That is why we are having the PBX's and the key equipment now showing much improvement over the years.

Mr. HUNTLEY. That is a true statement. I was having difficulty weighing between a commercial venture versus a tariff situation. The statement there is quite true.

Mr. HELLERMAN. If A.T. & T. were required to be out of the terminal equipment market, what do you think the result would be on residential telephone users? I realize that's a pretty broad question.

In other words, what do you think had been the effect of competitive pressures on equipment, flexibility, or bringing net costs down?

Mr. HUNTLEY. I would have to say any comment I would make in that regard is made in the absence of an in-depth analysis, Mr. Hellerman.

It would be nothing more than a personal opinion.

Mr. HELLERMAN. What is your personal opinion?

Mr. HUNTLEY. The impact on the general cost to the—

Mr. HELLERMAN. Residential user—

Mr. HUNTLEY [continuing]. If the Bell System were required to remove itself from the end terminal market?

I could choose a debate on either side. That is just too difficult a question to make a statement on. I would venture no opinion. Confronted with a given set of facts on any given day I could argue either side.

Mr. HELLERMAN. We will have further testimony on that point later in the hearings.

Could you explain what a plant network manager is?

Mr. HUNTLEY. A plant network manager in the A.T. & T. operating company connotation is a specific individual assigned to a major account to manage the operating aspects of that client's communications, the technical operational aspects.

Mr. HELLERMAN. Do you have one?

Mr. HUNTLEY. No; we do not.

Mr. HELLERMAN. Did you have one?

Mr. HUNTLEY. Yes; we did.

Mr. HELLERMAN. What happened to him?

Mr. HUNTLEY. Through a sequence of transfers and reassignments and retraining, those plant network managers assigned to the Continental account have disappeared. It is our understanding that there is to be a man assigned to our account within the immediate future, within the next 2 weeks to 30 days. We certainly hope that that comes about.

Mr. HELLERMAN. How long have you been without one, approximately?

Mr. HUNTLEY. Approximately 2 years. I would have to research that. That is an approximation.

Mr. HELLERMAN. When did you find out that you were going to have a plant network manager reassigned to Continental?

Mr. HUNTLEY. There have been several reassignments within the past 6 months, all of which have not been consummated for one personnel-associated reason or another. We were last advised approximately 30 days ago that we would have a new man added to the account.

Mr. HELLERMAN. During the past 2 years, how did not having one affect your operations?

Mr. HUNTLEY. It reduces our operating effectiveness. It increases the amount of time required to get circuits back on the air.

Mr. HELLERMAN. In other words, it affected your operations?

Mr. HUNTLEY. It affects our operations.

Mr. HELLERMAN. Do you think it is just happenstance you have been without a plant network manager for 2 years, or do you think it had something to do with policy of Continental to acquire purchased equipment?

Mr. HUNTLEY. We made the initial investigation pertaining to this equipment in April 1972—March and April of 1972. Prior to that time we were going through a period of reassignment of individuals of our plant network manager. I don't believe the two are associated.

Mr. HELLERMAN. Well, as I understand it, Continental has other interconnected equipment that your company owns. When you request an interconnect arrangement, what is the A.T. & T. reaction? Do they say, "Yes, sir, we will have one installed tomorrow; we will bring it right over"?

Mr. HUNTLEY. No. An interconnective device is normally not that readily available. It is not that common in the common carrier inventories as yet. We get a normal, satisfactory response on an interconnect arrangement. We, at times, have normal technological disagreements about the type of interconnect device to be used, but that is a normal event.

Mr. HELLERMAN. Do other things happen besides the fact you sometimes have to wait for delivery or the fact that you have to discuss which is the appropriate interface device? Do they question the wisdom of your system to purchase this additional equipment? Do they go to other parts of your management to discuss what the situation is?

Mr. HUNTLEY. Yes.

Mr. HELLERMAN. Could you expand on that a little bit? And what the result of those other actions might be?

Mr. HUNTLEY. I think that question is answered by the last paragraph of my testimony wherein our corporate management does give us some freedom to introduce new development programs. I would have to state there that if I were in a business and one of my clients chose to reduce my marketing situation I certainly would exercise every prerogative that I had to retain that business. That would be common business sense.

Mr. HELLERMAN. We have heard that EDP managers, when they recommend using IBM equipment, feel safe from criticism if the equipment doesn't satisfy the customer's requirements—or the employer's requirements; but if non-IBM equipment is recommended, they are, so to speak, at risk.

What is the situation like for the director of communications when he recommends non-Bell equipment?

Mr. HUNTLEY. I would say the situation is much the same. On the other hand, that is the difference between a manager properly exercising management prerogatives versus a manager not exercising those prerogatives. It has absolutely nothing to do with IBM, A.T. & T., or whatever. The underlying contention there is that IBM builds a good computer processor. I.T. & T. builds a good communications network.

Mr. HELLERMAN. On page 2 of your "New Horizons" speech attached to your statement, you state that history shows us that increased competition between communications suppliers results in major operating economies.

It goes on:

We will see a greater move from systems totally leased from a common carrier to systems which are mixed. * * *

New interconnection operations and maintenance philosophies must evolve to make these systems work effectively, but significant economies will result.

I wonder if you could comment further with respect to that statement.

Mr. HUNTLEY. I am still looking for it. Would you give me the page number of that again?

Mr. HELLERMAN. Yes.

Mr. HUNTLEY. Do you have the page number on that?

Mr. HELLERMAN. I seem to be having trouble finding that. Let's go on to another question. We can come back to that after I locate it.

Going back again to plant network managers, without which you have been operating for 2 years, as far as you know have other airlines experienced that situation? Have they been without a plant manager?

Mr. HUNTLEY. I think that several other carriers have experienced similar difficulties in the context of normal personnel transfers,

wherein a man comes on your account and spends 10 years on your account and is transferred off. That is a normal business problem.

Mr. HELLERMAN. Has the replacement period been as long as 2 years? Or is it more in the case of months?

Mr. HUNTLEY. I am not in a position to answer that. I am not knowledgeable in regard to specific intervals.

Mr. HELLERMAN. On page 3 of your statement you state you are chairman of the Airline Coordinating Committee for Telecommunications Service. Could you give us further information about that organization?

Mr. HUNTLEY. The Airline Coordinating Committee for Telecommunications Service is an organization of airline or air transport industry telecommunications directors and managers formed to discuss, decide upon technological systems, and to promulgate policy commensurate with their corporate policy.

We attempt to lean toward common use systems, joint development programs, effect economies throughout the air transport industry where they are favorable toward each individual airline.

Mr. HELLERMAN. Going back to the previous question regarding your "New Horizons" speech, it is in section 2.3 of that speech; it is the last paragraph.

Mr. HUNTLEY. What is your question?

Mr. HELLERMAN. Could you expand a little further on that?

Mr. HUNTLEY. This is really nothing more than the increased flexibility of options that the communications manager of a respected corporation will have to exercise, should he choose to exercise those options.

Mr. HELLERMAN. The first sentence talks about in forthcoming years. Is that because of the *Carterfone* decision, the fact that you can now purchase your own telephone equipment rather than leasing it from the telephone company?

Mr. HUNTLEY. I think that was a very pertinent milestone in the history of development of communications, from which has come substantial development by many corporations.

Mr. HELLERMAN. Had the FCC ruled another way—saying that you cannot purchase and connect your own equipment to the telephone network—do you think you would have been able to install, say, your Houston installation?

Mr. HUNTLEY. No.

Mr. HELLERMAN. Going back to the ACCTS Committee, you mention in your testimony that a request was made of Bell association to provide ACDS, and that the Bell person indicated the decision could not be made until 1975 as to whether or not they would be provided by the system; and that it would not be available, if they decided to provide them, until 1980.

I would like to have introduced into the record at this time the minutes of April 18, 1972, meeting of the Airlines Coordinating Committee for Telecommunications Services, Mr. Chairman.

Senator HRUSKA. No objection.

Senator HART. Very well.

[The minutes referred to appear as exhibit 5 at the end of Mr. Huntley's oral testimony.]

Mr. HELLERMAN. I would like to read a short paragraph from a newsletter put out by Consulting Communications Engineers, Inc., of Pennsylvania. As I understand, many of the people attached to that organization are former Bell employees. The newsletter concerns obsolete switching equipment. It says, "For one client, the central office switching systems of all the U.S. manufacturers were evaluated in the production of equipment by types estimates."

Talking about step by step, crossbar, re-relay crossbar or re-relay matrix with stored control. It goes on to say, "Sad to relate, obsolete equipment, one, accounts for about one-half of the current production. It is as if Ford were still producing 50 percent model T's for the 1974 models. New installations of XY and step by step are still being made."

[The newsletter appears as exhibit 2.]

Mr. HELLERMAN. Do you have any reaction to that statement? Would you like to see a copy of it?

Mr. HUNTLEY. No.

Mr. HELLERMAN. Does that surprise you?

Mr. HUNTLEY. No.

Senator HART. Is that your impression of the market?

Mr. HUNTLEY. I would have to expand upon that before I would be in a position to agree totally with that. There are many, many different applications of corporate communications. It is not fair to criticize where we are today unless we fully recognize from whence we came and how we got there. There are tremendous capitalization commitments throughout the country that one does not change overnight. To a large extent, we have an unfair criticism by corporate users of a network largely designed to satisfy public needs. I think we must keep that kind of thing in context.

Mr. HELLERMAN. Mr. Chairman, I have no further questions of Mr. Huntley. I would like to introduce into the record exhibits filed by MCI. They are details of actions which A.T. & T. and the Bell operating companies have allegedly taken against MCI and their customers. These actions include harassment of MCI and their customers; denial of services to MCI, which are routinely provided by the Bell operating companies, A.T. & T., Long Lines and Western Electric, as well as discriminatory treatment between MCI and A.T. & T. Long Lines and delay in providing services to MCI.

Senator HART. Without objection; but on the same condition—they be made promptly available.

[The exhibits referred to appear as exhibit 3 at the end of Mr. Huntley's oral testimony.]

Mr. CHUMBRIS. Mr. Chairman, before you go on to another point, Mr. Hellerman was discussing the use of old equipment and new equipment, and, whether you immediately go to all new equipment. Isn't one of the reasons for that the question of depreciation and amortization of the existing property and the concern of the rates a consumer pays. Do you just put aside all of the old and come in with the new, the latest electronic equipment that the consumer eventually will have to pay higher rates because the commission will have to take that into consideration as a rate base, et cetera?

Mr. HUNTLEY. That is true.

Mr. HELLERMAN. Isn't it also true that Bell directly takes equipment from one installation and reinstalls it somewhere else?

Mr. HUNTLEY. Yes, that is true.

Mr. HELLERMAN. That would mitigate against any burden—

Senator HRUSKA. Where else would they put it, if all the equipment is going to be sold to all the users?

Mr. HUNTLEY. I am not in a position to pass upon the Bell System accounting practices. I would hasten to add we sell airplanes to other carriers who use those airplanes. I think you have an equivalent situation there. Again technical innovation is not necessarily a reason for making a corporate commitment. One cannot change out the Bell System plant overnight without having a tremendous impact on corporate and the general public using it.

Mr. HELLERMAN. Mr. Chairman, I would like to introduce a further document at this time. It is a statement of the Telecommunications Association of New Jersey. This association was established to protect the consumer against the anticompetitive policy of A.T. & T., so says their president, Martin S. McDermott III.

Senator HART. Any objection?

Senator HRUSKA. No objection.

Senator HART. Very well.

[See exhibit 4 at the end of Mr. Huntley's oral testimony.]

Mr. HELLERMAN. No further questions, Mr. Chairman.

Senator HART. Thank you very much.

Mr. HUNTLEY. Thank you.

Senator HART. We will adjourn, to resume on Tuesday of next week, in this same hearing room.

[Whereupon, at 11:15 A.M., the subcommittee adjourned, to reconvene at 9:30 a.m., Tuesday, June 25, 1974 in room 2228, Dirksen Senate Office Building.]

[The following was received for the record. Testimony resumes on p. 3067.]

MATERIAL RELATING TO THE TESTIMONY OF C. M. HUNTLEY

EXHIBIT 1.—*Attachments to Mr. Huntley's Prepared Statement*

Attachment A

Technical Note TN-030

NEW HORIZONS IN CORPORATE TELECOMMUNICATIONS

(Presented Apr. 3, 1973, at the 23d Meeting of the Airline Coordinating Committee for Telephone Service, by C. M. Huntley, Director, Telecommunications, Continental Airlines)

1. INTRODUCTION

It's always fun to attempt to forecast the future—nobody can really disagree with you. If you are wrong—and things don't turn out the way you projected—you can always blame it on the constantly changing requirements. If you are correct—and things still turn out bad—you can still say "I told you so"—five minutes after you mail out your updated resume.

Seriously though, corporate telecommunications is a vital and fast moving area of responsibility, constantly changing and reacting to the expanding needs of a dynamic corporation. *Vital - Fast - Moving - Changing - Reacting - Expanding - Dynamic*. These are key words in describing telecommunications as a corporate asset. We all know about the information explosion; it's here now

and its going to get worse—an explosion in which the means and cost of telecommunications is totally subsidiary to the end desire for rapid and efficient information transfer. This implies new horizons, new problems, new opportunities and new planning.

Why is it then, that as corporate telecommunications managers, we are probably the world's worst planners? Why are we always the last ones within our respective corporations to find out what's happening? Why are we always in a reaction mode rather than a pre-action mode? Is it because:

We are complacent in our view of telecommunications as a corporate asset?

Are we too quiescent in our respective jobs, waiting to be told what to do?

Do we attend too many non-productive industry committee gatherings?

Do we fail to communicate, even though we have the world's best communications system at our fingertips?

Do we suffer from a "mother" complex—blame Ma Bell?

I don't begin to pretend to have the answers to these questions. But I am concerned that we, as corporate telecommunications managers, must continually expand our horizons as our functional responsibilities grow in future years. And right now we appear to be doing this without any apparent foresight or definitive planning action.

I would suggest as at least a partial solution, an increased emphasis within ACCTS to fill this gap. During 1973, we can lay the groundwork to develop ACCTS into the communications forum required by the industry to react to today's and tomorrow's problem. Using the resources at hand, we can make ACCTS the finest collection of knowledgeable industry talent directed toward solving corporate telecommunications problems. More importantly, we can make ACCTS the finest planning group in the industry—so that we don't have those problems.

2. HORIZONS - DECADE 1970's

Let's talk about horizons in the decade 1970's—where we should be going within our industry, within our respective corporations, within ourselves and with the groups with which we place requirements. Basically, we interface with five functional groups: The Bell System and other common carriers, The emerging specialized common carriers, System and equipment vendors, ARINC and ARINC Research, and Ourselves.

Taking each of these functional areas in turn, I would like to identify major items which, during the 1970's, will have a significant impact on the way in which our respective corporations earn a profit. Consequently, these are also items which we should, as a *responsible* and *responsive* air transport industry management committee, address our limited resources in forthcoming years.

2.1 *The Common Carriers*

Looking at the many forthcoming Bell System offerings, perhaps one major offering stands out—the soon-to-be-implemented Digital Data System (DDS). This system will be implemented in the 1974-75 era and will provide a multiplicity of private line data speeds on a direct interface level. The higher speed information rates (typically, 56 kilobit per second) are of particular interest. This service offering will provide several attractive features: Elimination of leased or customer-owned data set equipment, Reduced system coordination problems Increased system reliability, Reduced costs, and Greater flexibility

2.2 *Looking at the Specialized Common Carriers*

We have been hearing some strange names recently—MCI, WTC, SPCC, DATRAN and AMSAT. The emerging specialized common carriers are just that—emerging—with all the attending traumas of proposed service offerings, tariff filings and system turn-ups. Within not too many years, however, the specialized common carriers will become another vital supplier responding to the needs of the corporate telecommunications managers. History shows us that increased competition among the communications suppliers invariably results in major operating economies. There are two major areas to which we should address ourselves: Terrestrial applications—both within PLIN and to support individually controlled network segments, and Satellite applications—again, both within PLIN and to support individually controlled network segments.

I firmly believe that these two areas will almost totally change our view of corporate communications from one of an "expensive necessity" to that of a

"cost effective manner of pursuing a profit". We will see existing cost performance ratios almost totally destroyed as the exciting new concept of "distance independent" service tariffs and costs come into play in future years.

2.3 *The System Vendors*

A walk through any of the major system vendors' facilities provides insight into many new product lines becoming available. To name a few . . . Computerized ACD systems, Low cost AFSK channelization systems, High speed time division multiplexing systems, Digital voice multiplexing systems, and Electronic PABX systems.

Any one of these areas will have a major impact in forthcoming years in the manner in which we do business as a corporation. We will see a greater move from systems totally leased from a common carrier to systems which are mixed—part common carrier, part specialized common carrier and part customer owned and maintained. New interconnect, operations and maintenance philosophies must evolve to make these systems work effectively, but significant economies will result.

2.4 *The ARINC Companies*

In the ARINC companies we really have one of the finest collections of available communications resources within any single industry grouping. The air transport industry stands alone as the one industry which has a commonality of shared communications services. We are often admired, always envied and frequently cursed for the so-called preferential treatment. We should not forget, however, that this preferential treatment is due simply to the foresight of our predecessors 44 years ago in recognizing a common industry problem. And, further, the benefits enjoyed today result from continuing efforts throughout these 44 years to mold a communications development, planning, operations, maintenance and administrative group responsive to the requirements of the air transport industry. We are now faced with the problem of owning a firm which is not always responsive to our requirements,* and we certainly have every right to ask why. We should really ask two questions, one of each ARINC operating firm—Aeronautical Radio, Inc. and ARINC Research Corp.

2.4.1 *Aeronautical Radio, Inc.*

If I may plagiarize, I would state that I firmly believe in the "economy of scale"; that is to say that, through building and operating larger systems responsive to our community requirements, we develop significant operating economies. However, we also develop administrative problems. We have heard a lot of criticism in past months pertaining to these administrative problems, but I also firmly believe that since we own and control ARINC, one cannot criticize their techniques and methods without looking very closely in the mirror. We are, in fact, criticizing our own ineptness at system management.

These problems notwithstanding, major programs within Aeronautical Radio which should excite our interest are:

The air/ground data link program with the attending ground system interface.

The aeronautical satellite program—again, with the attending ground system interface.

The integrated switching network (ESS).

The intercity communications systems (PLIN and PLIDS).

• Systems management and maintenance.

2.4.2 *ARINC Research Corporation*

We don't hear too much about ARINC Research Corporation. For many years it was an ivory tower, Department of Defense oriented research and development firm. Only in recent years have the talents of the ARINC Research group come to light; and, frankly, they have only come to light due to the reversal of the DOD economic situation and the resulting necessity of ARINC Research Corp to diversify its marketing efforts. I think we should recognize, however, that within ARINC Research Corp. we have an industry-controlled, profit-oriented research and development firm with hundreds of man-years of talent in the system architecture areas of: Requirements definition, Investigation of alternative technical approaches, Cost-effectiveness analysis, Cost-impact analysis, Project implementation, and Asset management.

To name just a few of the many projects which I would think would be applicable to the airlines' requirements: Naval Tactical Data System (NTDS), Marine Tactical Data System (MTDS), Air Tactical Data System (ATDS), Secure VHF Airborne Repeater Systems, and Corporation information and message switching systems.

2.5 The Telecommunications Manager

We should not forget ourselves as an available resource in addressing tomorrow's problems; however, we must also recognize the necessity of changing our management and engineering methodologies as our individual corporate requirements change. We must be open to individual and industry-oriented educational programs in both the technical and management sciences. Further, we must eliminate our current "not invented here" philosophy of managing our affairs. We should strive to utilize our outside resources where it may be shown that these resources will remove internal staff limitations and produce a significant benefit at minimal cost.

3. WHERE DO WE GO FROM HERE?

These forthcoming service offerings sound attractive, and they sound technically exciting. Finally, the mention of reduced operating costs is always an attractive carrot. 1974-75 isn't too far away; it would seem reasonable to expect that within each functional area just mentioned at least six things would have happened by now or should now be actively happening:

1. The supplier representatives would have made extensive presentations to individual corporate telecommunications managers regarding service availability, the discrete locations and costs.

2. The supplier representatives would have presented complete technical and cost proposals specifically oriented to individual customer's network requirements.

3. The supplier representatives would have prepared an industry presentation of the forthcoming service offering, providing a detailed synopsis of this offering's impact on the air transport industry as a whole.

4. The individual corporate telecommunications managers, responsive to their internal corporate requirements, would actively and aggressively seek extensive planning sessions with the appropriate supplier representatives.

5. The ACCTS Steering Committee, recognizing this forthcoming supplier service offering as one technically exciting and cost attractive to the air transport industry, would have directed the working groups of ACCTS to address this problem with the appropriate supplier representatives.

6. Finally, that assigned working group within ACCTS would have fully investigated the proposed service offering on a working level basis and presented their findings to the ACCTS body as a whole.

I suggest that none of these vital planning actions have occurred to date. But let's not blame the suppliers—let's blame ourselves for not initiating that vital person-to-person communications link—that link which, out of necessity, must exist between the purchaser and the supplier of services. On the other hand, let's not let the suppliers off scot-free—person-to-person communications is a two-way street. There must be *action* and *reaction* on both sides to insure that the necessary planning information is developed adequately to support our needs as telecommunications managers, responding to overall corporate objectives.

Let's make the ACCTS group that professional communications forum necessary to ensure a fully integrated supplier/purchaser team effort responding to our industry requirements.

To meet this objective, I would suggest that we give to the Steering Committee the charter for developing a definitive action plan.

1. Prepare a draft Terms of Reference expanding the ACCTS charter to include all ground communications functions. This draft should be presented for ACCTS review and approval no later than the September meeting and then forwarded to ALCAC no later than October, 1973.

2. Develop specific recommendations pertaining to functional reorganization of the working groups.

3. Review the current needs of the air transport industry and develop discrete task areas for each of the working groups.

4. Establish a task monitoring program, including schedules and budgets for each of these task areas.

5. Assign these task areas to the applicable working groups and then conduct the monitoring program.

6. Establish a special ad hoc group to investigate potential engineering and management science educational programs currently available from the common carriers and the vendors.

In the overall interest of time, economy and industry requirements, we should insist that this effort be completed no later than the fall meeting of this committee. We may then use this expanded charter to rekindle the professional enthusiasm necessary to ensure a successful and aggressive ACCTS in future years.

Attachment B

PRESENTED AT DATA COMMUNICATIONS INTERFACE 74, DALLAS, TEX., MARCH 25/26, 1974

(By C. M. Huntley, Director-Telecommunications, Continental Air Lines, Los Angeles, Calif.)

1.0 INTRODUCTION

Good afternoon, ladies and gentlemen. I certainly appreciate the opportunity of representing the air transport industry at INTERFACE 74 and, in particular, presenting our on-going programs at Continental Air Lines. At Continental, we view the Telecommunications Department as a service organization, applying management science techniques and engineering technology to planning and developing optimally cost effective communications systems responsive to corporate objectives. Our charter may be further broken down to

Providing increased communications dollar effectiveness through the application of systems technology required to meet the ever expanding requirement for telecommunications, and

The application of system management techniques to control this advanced technology.

We particularly view telecommunications as a functional tool of airline marketing since the area of marketing is where we spend the majority of our telecommunications dollars.

Particularly, telecommunications in the air transport industry must serve to:

- Improve customer service,
- Reduce operating cost, and
- Increase revenue.

2.0 THE NEGLECTED APPLICATION

Telecommunications management is certainly no different from any other resource-constrained corporate activity. It's necessary to concentrate one's limited time and effort to managing those functions which have the most significant impact on the allocation of corporate resources. At Continental, we work within five system areas. These are:

- The real-time reservations and message switching data system,
- The reservations telephone system,
- The administrative telephone system,
- The extended area telephone system, and
- Airport information systems.

In past years, we have concentrated our efforts towards management and improvement of our on-line data systems to the extent of integrating equipments such as:

- AFSK multiplexing systems,
- Customer-owned, medium-speed data sets,
- On-line concentrating systems, and
- Time division multiplexing techniques.

By making the appropriate capital investments in customer-owned equipment, and with the application of network management techniques, we have been able

to make significant inroads in reducing our recurring operating costs measured on a year-to-year basis.

However, our corporate management recently asked the rather astute question "if we are indeed saving so much money, why are our telecommunications costs constantly increasing?". This seemed to be a rather valid question and, discounting the normal growth in corporate activity, it still disturbed us—accordingly, we did some rather extensive cost analyses of where our dollars were actually going and we found, much to our surprise, that with all the application of sophisticated technology to our on-line data communications systems, we had the right solutions but applied them to the wrong problem first.

In terms of overall telecommunication dollar expenditures at Continental, we spend something on the order of 87% for telephone services and approximately 11% for data services. While data communication planning and engineering was, at that time, certainly more esoteric, we had been devoting our limited staff time to a relatively unfruitful area, while ignoring other, more dollar significant, areas.

Upon further analysis, it became apparent that little of the advanced technology which had been applied to the data communications system problems had yet to be applied to corporate telephone systems; all of the technology was available—it simply had not been applied. We were indeed operating our extensive telephone systems with the technology of the 1930's.

3.0 THE INTEGRATED TELECOMMUNICATIONS SYSTEM

On April 15, Continental will cut over at Houston, Texas, the first time division multiplexed, pulse code modulation, integrated telecommunications switching system for handling our reservations trunking, together with the control of our dial tandem system and our administrative telephone requirements. This switch will handle twelve 1.544 megabit data lines and 288 56-kilobit data lines. The system represents a state-of-the-art advance in the switching and control of telephone systems in a truly digital environment. Jointly developed by Continental Airlines and Collins Radio, the system will provide automatic connection of a large number of telephone trunks to a large number of local extensions through a fully connected, non-blocking computer controlled solid state digital switch. The trunks may be local Central Office trunks, Foreign Exchange trunks or PBX trunks with or without dial capability. The extensions may be agent positions, supervisory positions, or administrative telephone extensions.

The system operates simultaneously in three modes:

As an Automatic Call Distribution System for incoming reservations-oriented calls.

As a local PABX-Private Automatic Branch Exchange, and

As a Dial Tandem Switch.

Control of the system is provided by a dual programmable computer with the software providing system monitoring and control, while simultaneously gathering and processing pertinent system performance parameters to provide timely information necessary for efficient system management. The system monitors the trunks for incoming calls, connects each incoming call to an available sales agent, and disconnects the call when the customer or agent hangs up. The computer then logs each call, accumulating data for system and agent operational statistics and performance monitoring. The Automatic Call Distribution System offers the following advantages:

Faster and more efficient handling of calls with fewer personnel,

Better management control through dynamic staffing and trunk planning,

Enhanced system availability through high reliability of the system hardware and backup for critical system elements,

More efficient supervision and closer monitoring of agent performance,

The ability to reconfigure the system for optimum use of current resources in a matter of minutes,

Unlimited flexibility in switching, through program control, and

Optimal workload balance among available agents.

In the PABX and dial tandem mode, the system will provide:

Toll call restriction, by area code, exchange or number

WATS and Foreign Exchange restriction, again by area code, exchange or number,

Dial compression or code dialing,
 Calling party identification,
 Executive identification,
 Optimal call routing algorithms, and
 Call logging.

The system consists of seven hardware modules:

PCM channel bank units,
 The solid state digital switch,
 The dual programmable control units,
 Agent consoles,
 Supervisory consoles,
 Service equipment, and
 PABX extensions.

Incoming telephone trunks are connected through a telephone company provided voice connecting arrangement to a number of PCM channel bank units and a processor controlled switch bank made up of 24 line modules. Additional channel bank units connect the agent sets, the supervisory sets and the PBX telephone extensions.

The PCM channel bank units each connect to 24 voice lines and provide the interface of the system with the talking paths. The units convert analog voice information to sampled digital voice for processing by the digital software. The interface with each individual line is provided by a channel unit which adapts the PCM channel banks to the requirements of the various voice trunks and agent consoles. The interface with the digital switch is a serial bit stream at a 1.544 megabit rate which consists of a digitized sample of each of the 24 lines repeated at 125 microseconds intervals. The format of the samples is identical to that of a T1 carrier line with D2 sampling.

The solid state digital switch provides the paths to interconnect the trunks and extensions. The switch is non-blocking and fully connected. A fully implemented switch will support up to 512 similar connections. The interconnect paths are provided by time division multiplexing channels controlled by time slot memories loaded by the program control. The switch is modular in increments of 24 lines.

The entire switch network is under control of a set of program modules stored in the digital processor. The program repetitively scans all incoming lines and extensions. Based on the instantaneous condition of each, it distributes the calls in a manner which optimally and evenly distributes the work load to the agent force. The program modules also accumulate and display information required for agent force and network management while retaining key data for historical analyses of long term trends.

The agent set is a compact human engineering unit that is designed to speed the handling of incoming calls and to provide rapid access to supervisory assistants when required. Provisions for call holding, transfer and conference are included. A TOUCH TONE style dialing pad enables significantly faster dialing than conventional dials. Lighted push buttons signify the status of the position and provide for the rapid connection and release of incoming calls. Buttons are also provided to repeat the audio announcement of the calling party location to secure an outside line, to reach the group supervisor and to signal an emergency. The position equipment includes a STARSET headset.

The master and group supervisory position equipment includes a control set similar to the agent set and a CRT display unit as well as a headset. The control set includes all of the functions of the agent set and, in addition, provides two outgoing line selections, barge-in and monitoring facilities. It also contains control buttons to play back voice announcements and to record new announcements in the system voice recorders. The CRT display is a self-contained desk-mounted unit. It normally displays current group or system operating status at all times. The display of selected operating data can be achieved by simple key board entries from the supervisory position. Information or data requiring immediate supervisory attention is displayed in blink or reverse video form.

The system service equipment includes dual emergency recorders which are automatically activated upon agent declaration of an unusual situation, 12 channel trunk identification announcement recorders, a high speed line printer for obtaining printed copies of system status and operating information on a recurring basis and maintenance teletype consoles for use by the service technicians. In addition, tone generation and detection equipment is provided to fulfill all PABX requirements.

Administrative PABX extensions within the system may utilize the normal multiplicity of instrument types provided by the various interconnect vendors. Particularly, single line instruments, multiple line instruments, telephone key equipment and automatic answering devices are employed.

4.0 THE TECHNICAL APPROACH

The overall concept was jointly developed by Continental and Collins during discussions held early in 1972; Collins had previously developed a digital switch as an internal R&D program, and was searching for a commercial application. On the other hand, Continental had defined an operating concept but could not find an operating system. A healthy marriage of technological and operational experience provided the baseline for a successful development program.

Continental then employed the system architecture approach in developing and procuring the switching system with the assistance of the system consultant, ARINC Research Corporation. First, a feasibility study was conducted which demonstrated that the time division multiplexed, pulse code modulated voice switching arrangement was indeed

Technically feasible

Operationally feasible, and

Cost attractive.

The initial cost study showed that the system would pay for itself on a hardware purchase versus the lease of current Bell System equipment within 8 years or less. Based upon this study, a detailed Request for Proposal (RFP) was released to some 22 vendors, outlining the specific characteristics desired by Continental. Engineering and cost quotations were received and evaluated on a cost versus system effectiveness basis and a vendor selection was made in favor of Collins Radio. Finally, a life cycle financial study was conducted to present the actual cost savings to corporate management and secure final approval. Our studies showed that by proceeding with the development and procurement of the system, an eight year life cycle savings of greater than \$15,000,000 would be achieved by expending approximately \$600,000. This in-depth cost study covered all facets of the proposed system including revenue from lost calls, agent and supervisory personnel savings, the reduced number of trunks due to the faster handling of calls, and the management of our extensive telephone network resulting in reduced network costs. The final approval of corporate management was received and a contract was awarded to Collins late in July of 1973. The system consultant was again retained to provide implementation support.

5.0 CONCLUSIONS AND SUMMARY

Now, eight months later, we are about to cut over the world's first commercial time division multiplexed PCM solid state digital telephone switch. Perhaps the most exciting part of this program has been the response of our corporate management in a commercial environment to an engineering development program leading to an exciting new marketing system which uses state-of-the-art technology to increase Continental's profit margin. Finally, I think that Continental has demonstrated to the industry that corporate funds may be obtained to pursue well defined technological programs of significant benefit to both the end-user and the supplier. Other recent development programs of significant interest are:

Intelligent Flight Information Display Systems—software controllable to enhance operational configuration changes.

Network management techniques—using dynamic timesharing configuration models,

Seasonal trunk forecasting—the use of timeshare based mathematical models to forecast all trunk needs, thus optimizing resources.

Voice multiplexing—the use of speech processing and digital techniques to increase voice channel capacity on a 4 to 1 basis, and

39 GHZ TDM microwave links—to resolve the intra-city short-haul communication problem.

In short, we have the need and the financial resources; the suppliers have the technological capability to support this need. If you are not already doing so, you should look closely at the application of data system technology to corporate telephone systems. It's wide open and ready for exploitation.

APRIL 14, 1972.

Company Confidential

To: A. Damm, C. Bucks, W. Van de Bunt.
 Subject: Customer-Owned Telephone System.

The Telecommunications Department has developed an initial system concept which could revolutionize Air Transport Industry Telecommunications systems. This system concept will provide Continental Airlines the opportunity to become the industry leader in applying maximally cost-effective telecommunications techniques to the corporate problems of reservations/sales, operations, maintenance and administration.

Continental Airlines now operates four telecommunications "systems": these are: 1. SONIC 360, 2. The Reservations Telephone System, 3. The Extended Area Telephone System, and 4. The Administrative Telephone System.

The major effort of the Telecommunications Department during the past two years has been oriented towards the application of systems engineering technology and management science techniques to planning and developing optimally cost-effective communications systems responsive to corporate objectives—moving our thinking and planning process from living with today's problems to the solution of tomorrow's. Working systematically and logically, armed with the three tools of technical documentation support, analytic management methods and systems contract support we have developed on-going annualized savings to Continental Airlines in excess of \$580,000; of these developments, savings in excess of \$400,000 per year have actually been implemented to-date. Three premises now pertain:

1. Continental is about to make a long-term commitment in the area of administrative general office functions.

2. This commitment could be seized as an opportunity to *totally revise* the current methods with which Continental communicates, providing a radically increased level of service to the user at far less cost.

In response to this challenge, four system application areas are currently being approached in a conceptual manner by my department:

1. Initial application of the planned ARINC microwave system to provide, as a start, inter-building communications circuits.

2. The design and installation of an inter-building television conferencing system for management.

3. An intra-building customer-owned telephone system.

4. A newly designed customer-owned reservations telephone Automatic Call Distribution System (ACDS), which could then be progressively "grown" toward a total corporate telephone switch.

We have developed an extremely exciting concept to support the latter application - that of designing and installing a customer-owned digital telephone switch and attending ancillary equipment (agent positions, statistical collection, etc) to replace the currently planned installation of two Bell System Model 3A mechanical ACDS. This system:

1. Would cost less than \$500,000, displacing a currently planned expenditure of \$15,000 per month for a Bell System mechanical ACDS.

2. Be a total digital switch, providing analogue (voice) to digital conversion and subsequent store and forward switching of incoming/outgoing calls.

3. Would collect, collate and reproduce all necessary statistical data eliminating the current necessity of frequently collecting and "working" FADS related information.

4. Would provide computer-generated voice response for such applications as weather and flight information, together with unique marketing applications.

5. Using off-shelf system components, could be developed, installed and tested in a time-frame equivalent to that of a Bell System ACDS, i.e., 12-15 months from receipt of order.

6. Would be fully capable of modular expansion, to include digitizing the reservations and administrative long-line trunks, displacing a current leased line cost of \$2-3 million per year.

In order to implement the new system within the required time frame, we must have a corporate "Go/No Go" decision no later than July 1, 1972, the last date to which we can commit for Telephone Company installation. Thus, my

department must complete the preliminary systems architecture effort, providing corporate management with my decision, no later than June 15, 1972. We must answer the following questions prior to that time:

1. Whether it is technically possible to implement a new ACDS with existing technology.

2. Whether it is economically attractive to institute a new system.

3. Whether the new system could be successfully placed in operation in the required time frame.

I have developed with ARINC Research Corporation, under our Basic Purchasing Agreement, a proposed Task Order No. 6 which will provide Continental with contract staff engineering services during a period of eight weeks, assisting my departure in performing the necessary system engineering tasks. Further, I wish to commit my departmental staff according to the attached schedule. Additionally, we now plan to have Collins Radio personnel on-premise for two weeks to provide assistance in this effort.

Your approval of this task, together with the associated Project Description TC-70, would be appreciated. Upon your approval, I will then ask Mr. Stevens to budget the necessary funds.

C. M. HUNTLEY.

APRIL 14, 1972.

Company Confidential

To: P. Hopkins; J. Burhoe.

Subject: COAM ACD Functional Specification.

Collins Radio will provide on-premise staff personnel during the period April 18 - May 2 to assist us in developing a detailed system functional specification for a customer-owned and maintained "soft" telephone switch meeting the requirements of (1) all anticipated reservations telephone functions and (2) potential growth to incorporate the administrative and extended area telephone systems. This memorandum is intended to develop a course of action such that we have a significant product at the end of the two-week engineering period. The following schedule pertains:

Tuesday—April 18

Initial discussions between Collins and Continental personnel pertaining to the existing functional specifications of a normal AT&T supplied Model 3A ACD to include all system characteristics. Develop detailed costs of the proposed 3A system. The initial output of this day's effort should be a written paragraphized description of what an ACD does for Continental Airlines in the reservations telephone environment, together with currently proposed costs.

Hopkins—4 hours, Burhoe—4 hours

Wednesday—April 19

An effort similar to that described above will be conducted for the AT&T FADS offering as it now exists, together with the existing agent telephone positions. Similar to the previous day's effort, a written paragraphized functional description delineating all applicable FADS characteristics and system costs should result.

Hopkins—4 hours, Burhoe—4 hours

Thursday—April 20

A total systems critique of the current ACD, FADS and agent position operation as they apply to the Continental reservations sales effort should be conducted. This will entail a somewhat "blue sky" effort delineating reservations sales functions which could or should be incorporated into a totally new airline ACD package. No holds are barred in this analysis.

Hopkins—4 hours, Burhoe—4 hours, Huntley—8 hours

Friday—April 21

This day will be devoted towards marrying the previously determined "existing" ACD specifications and the "blue sky" specifications into a specific application to the Continental reservations sales environment. An initial written system specification and block diagram should result. The latter part of this day should be devoted towards coordinating these requirements with Messrs Purdom, Jones and Drum.

Hopkins—4 hours, Burhoe—4 hours, Huntley—6 hours

Monday—April 24

Slippage.

Tuesday—April 25

Traffic statistics including input, output and system throughout will be fully developed. Specifically, call volumes by city gate group, peaking factors, hold time distributions and any other pertinent statistical information available from current reservation trunking models will be reviewed and thoroughly evaluated as a system design parameter.

Burhoe—4 hours, Huntley—6 hours

Wednesday—April 26

This day will be devoted towards detailing a system functionalized concept to the major function subsystem or level. Specific consideration should include multiple gate operation, computer generated audio response, outgoing or call-back service, internal (cross-office) switching, interconnection to Centrex, etc.

Hopkins—4 hours, Burhoe—4 hours, Huntley—6 hours

Thursday, April 27

Slippage.

Friday—April 28

A review of the entire system development effort will be conducted. We should at this time have developed initial but firm feeling towards:

A. The technical feasibility of the overall project.

B. The economical feasibility of the project.

C. The corporate risks involved in assembling a working system on-line by the May 1973 time period.

Burhoe—6 hours, Huntley—4 hours.

This project is not to be discussed with Telephone Company personnel at any time.

C. M. HUNTLEY.

Attachment D

HOU CCACDS—PROSPECTIVE BIDDERS LIST

1. Collins Radio Company.
2. Stromberg-Carlson, Communications Division.
3. RCA.
4. Philco-Ford Corporation, Communications and Technical Services Division.
5. Page Communications Engineers, Inc.
6. Northern Telecom, Inc.
7. North Electric Company.
8. IBM.
9. ITT-Defense Communications Division.
10. Honeywell, Inc. : Data Processing Division.
11. Ericsson Centrum, Inc.
12. Burroughs Corporation.
13. Fisk Telephone Systems.

EXHIBIT 2.—*CCF Newsletter Excerpt*

Summer 1973

PRODUCTION OF OBSOLETE SWITCHING EQUIPMENT

For one client, the central office switching systems of all of the United States manufacturers were evaluated and the production of equipment by types estimated. The equipment systems were classified as follows:

- (1) Step-by-step and X-Y.
- (2) Crossbar or reed relay matrix with wired common control.
- (3) Crossbar or reed relay matrix with stored common control.

Sad to relate, obsolete equipment (1) accounts for about one-half of the current production. It is as if Ford were still producing 50% Model T's and the remainder split between 1950 and 1974 models. New installations of X-Y and step-by-step are still being made.

* * * * *

EXHIBIT 3.—*Documents Re Actions of A. T. & T. Allegedly Taken Against MCI and Customers*

MCI TELECOMMUNICATIONS CORP.,

Washington, D.C., June 10, 1974.

Mr. JERRY HELLERMAN,
Senate Antitrust and Monopoly Subcommittee,
U.S. Senate,
Washington, D.C.

DEAR MR. HELLERMAN: Enclosed is a series of instances by which AT&T has negatively impacted MCI's marketing efforts.

Of particular interest was the potential account, Young & Rubicam, which had placed an order with MCI for service and then cancelled this order just prior to installation. Young & Rubicam handles the advertising for New York Telephone.

I hope you will find these materials helpful.

Very truly yours,

LAURENCE E. HARRIS.

Enclosures.

The enclosed exhibits set forth in detail actions which AT&T and the Bell Operating Companies have taken against MCI and MCI's customers. These actions include harassment of MCI customers, denial of services to MCI which are routinely provided by the Bell Operating Companies to AT&T Long Lines, and Western Union as well as discriminatory treatment between MCI and AT&T Long Lines and delay in providing services to MCI. The following memorandum is intended to be a summary of the enclosed material.

HARRASSMENT OF CUSTOMERS

Computer Dimensions

The day after an article appeared in the December 26, 1973 edition of *Computer World* discussing Computer Dimensions, Inc.'s use of MCI data service, Southwestern Bell Telephone Company informed Computer Dimensions that its payments for the past two years had been reviewed and that there was reason to require Computer Dimensions to give Southwestern Bell a two-month deposit on all services. Computer Dimensions stated that since all bills during the last year had been paid within 20-30 days except for one which was late because of Southwestern Bell's error, Bell's action was due to the article in *Computer World*. [Exhibit 1 (hereinafter E.____)].

Young & Rubicam

The Communications Manager for Young & Rubicam, a New York ad agency which has a large account from New York Telephone Co., ordered service from MCI. Inadvertently, this fact was published in an article in *Electronics News* about MCI's New York opening. New York Telephone contacted its Young & Rubicam account representative and asked for a meeting to discuss the matter. Lee Caputi, Young & Rubicam's Communications Manager, was told on November 5, 1973 to prepare a presentation for November 5th on MCI and on the issue of why Young & Rubicam should go with MCI service and jeopardize a \$4.9 million account with New York Telephone. Although no one ever specifically indicated that New York Telephone would switch agencies, the implication was obvious.

New York Telephone participated in the presentation and recommended that Young & Rubicam re-evaluate the use of tie-lines in general and consider whether or not WATS lines could carry the extra capacity. At this point, Young and Rubicam's upper management asked Ms. Caputi to ask for a thirty day delay in the MCI installation so that Young & Rubicam could evaluate its WATS usage. (E2).

Harris Trust

On January 7, 1974, MCI installed service between Chicago and New York for this customer. The customer desired that the MCI line run parallel with AT&T's existing line for several days so that the customer could be assured that the MCI line was working well before disconnecting AT&T; however, at about 9:00 A.M. on January 7th the AT&T line was disconnected although the customer had not issued a disconnect order. It is believed that New York Telephone

Company issued the order. The customer immediately requested that service be restored but as of 3:00 P.M. on January 10, 1974, the service had not been restored. The customer then advised AT&T to forget about service restoration since MCI's line was working well. (E.3)

Maryland Cup

On January 7, 1974, the customer called MCI and stated that MCI should stop all action on the customer's order of service to New York. The customer stated that a Chesapeake & Potomac Telephone Company salesman had called on her and explained Bell's Hi/Lo service (currently being reviewed by FCC and not in effect as of April 1974) and proved that Bell would be less expensive than MCI. (E.4).

Pittsburgh Plate Glass

For years Al Basom, Communications Manager for Pittsburgh Plate Glass, has only needed to call his Bell representative for his sales order numbers (needed to co-ordinate changes in service to be provided), however, when he called to obtain the sales order numbers so that he could order the connection of MCI circuits and the disconnection of Bell circuits, he was told to submit the request in writing. This resulted in several days delay in the installation and in loss of revenue to MCI. (E.5).

DENIAL OF SERVICES PROVIDED TO AT&T LONG LINES

Transitting

Transitting is the interconnection of two specialized common carriers so that they can provide through service. Illinois Bell has continued to take the position that it will not furnish transitting facilities to interconnect the MCI and NCCC terminals in Chicago, even though Mr. F. J. Woods of AT&T stated during the hearing on MCI's request for a preliminary injunction that AT&T would permit transitting. AT&T also made this assertion in its proposed Findings of Fact and Conclusions of Law in the case. (E.6).

Local Distribution Areas

Another practice on the part of AT&T and the Bell Operating Companies has been to deny MCI local distribution facilities between an MCI terminal and a customer whose premises are located outside of a local distribution area which is unilaterally and artificially determined by AT&T and the Bell Operating Companies even though interconnection to permit a common carrier to connect with customers outside of the so-called local distribution area is routinely provided to both Long Lines and Western Union in the form of interexchange facilities (IXC). (E.7) An illustration of this practice is the case of Simplicity Pattern Company, Inc. of Niles, Michigan which is a suburb of South Bend, Indiana. Indiana Bell Telephone refused to provide local distribution facilities to Simplicity because Niles is outside the South Bend-Osceola Local Distribution Area; therefore, MCI cannot provide service to Simplicity. (E.8). Other examples include A.C.F. Industries in St. Charles, Missouri. (E.9), Pfizer, Inc. in East St. Louis, Illinois (E.10), Hewlett Packard, Paramus, New York. (E.11), Applied Logic, Princeton, New Jersey. (E.11), Management Science Associates, Inc., Des Plaines, Illinois. (E.11), Hewlett Packard, Rockville, Maryland. (E.12), Litton Industries, Reston, Virginia. (E.12), The Southland Corp., Falmouth, Virginia. (E.13), and Bethpage, Elmsford and Westbury in the New York area. (E.14)

Foreign Exchange Service (FX)

This is a form of private line service which allows a businessman located in one state to, in effect, maintain a local telephone within another State. AT&T and the Bell Operating Companies have consistently refused to provide MCI with the local distribution facilities necessary to provide the service, resulting in backlogs of unfilled orders and loss of revenue to MCI. (E.15, see E. 12 & 13). Denial of this service also causes the related problem of restrictions being placed on the customer's capability to dial directly into the local exchanges from his private line. (E.16, E.17)

Common Control Switching Arrangement (CCSA)

CCSA is a private line system used for linking the various offices of a large company through private lines connected by switches on the local telephone

company's premises. AT&T and the Bell Operating Companies have denied MCI the local distribution facilities needed to provide the private line links, resulting in unfilled orders and loss of revenue to MCI. (E.18 and E.19)

Customer Premises

Local distribution facilities will only be provided to an MCI customer's premises. No such restriction is put upon AT&T Long Lines. An example of this restriction is the refusal of Bell Telephone Company of Pennsylvania to install local distribution facilities in space leased by Dialco (an MCI customer) in the MCI terminal because this was not the customer's premises. (E.20 and E.21).

DISCRIMINATION BETWEEN MCI AND AT&T LONG LINES

This area necessarily includes denial of services to MCI which are provided to AT&T Long Lines as discussed *supra* but, in addition, includes services which are provided to MCI on a different basis than that upon which they are provided to AT&T Long Lines and Western Union.

Interstate - Intrastate

In several instances, the Bell Operating Companies have stated that the local distribution facilities which are considered interstate service when provided by the Bell Operating Company to AT&T Long Lines will be considered intrastate service when provided by the Bell Operating Company to MCI. This would result in a higher rate to the customer for the local distribution facilities. A prime example is the case of Korvettes. (E.22) Other examples are Telemart Consultants (Harris Intertype) in Ohio (E.23) and St. Regis Paper in New York. (E.24) The FCC has required Bell to explain this practice. (E.25).

Discriminatory Installation Charges

New York Telephone stated that to provide service to Metromedia (an MCI Customer), it would charge the customer \$2.30 per month and charge an installation fee of \$50.00 for a room circuit to connect MCI equipment to Metromedia's frame. AT&T Long Lines is not charged for this service. (E.26)

Free Services

Mr. Eric Kert, Corporate Treasurer of Rigensteiner Publishing Enterprises (a prospective MCI customer), advised his MCI representative that he probably would not use MCI Service. His reason was that when his existing service (provided by AT&T Long Lines) fails, he uses the direct dial network at no cost to him upon the advice of his Illinois Bell Telephone marketing representative. Mr. Kert further stated that when his line had been down for two hours, he had used the direct dial network and the toll charges were picked up by Illinois Bell Telephone Company. (E.27)

Diversification

According to information given to an MCI representative, minimum of 25% of the circuits for a given customer to a given premise are automatically placed upon different carrier systems by the Bell Operating Companies for AT&T Long Lines (diversified) so that service will not be totally cut off if one carrier system is out. When MCI asked for such diversification in circuits for Gateway Transportation to avoid the recurrence of a three hour failure in the circuits, Illinois Bell refused the request stating that it was not in the practice of insuring diversity of circuits. (E.28)

Other

Another example of discrimination is an anonymous note written on the cover of a piece of MCI equipment in a customer's wire closet which stated, "This does not belong here. Please remove." The Bell foreman stated that he had not done it and that he would instruct his people that MCI's equipment has every right to remain in any wire closet. (E.29)

A final example of discrimination involves an MCI employee who was dismissed from MCI through mutual agreement. He was formerly an employee of AT&T Long Lines. After leaving MCI, he re-applied at Long Lines. He was informed that it was AT&T Long Lines' policy that anyone leaving them and going to work for MCI was not eligible for re-hire. (E.30)

Delay

Numerous examples can be cited of Bell's delay in providing local distribution facilities to MCI. (E.31) One example is New York Telephone Company's delay in supplying interconnections to Centrex CO equipment. As of January 15, 1974 MCI was abruptly informed by Bell's Business Relations people that all MCI orders of this type were on hold until additional information concerning the distant end equipment was provided by MCI. This was the first time that the lack of such additional information was given by Bell as a reason for Bell's delay in filing this order. Bell's new requirement immediately affected a scheduled January 10, 1974 service date for Reynolds Securities. (E.32)

A major example is the experience MCI had in attempting to secure local distribution facilities from Southwestern Bell Telephone Company. This is set forth in the material comprising E. 33.

Another example of delay is Bell's failure to honor commitments to coordinate the disconnection of Bell service with the connection of MCI service. In several instances a firm time was set and Bell's representative failed to show up or was not qualified to perform the disconnection. Examples include Chas. Pfizer & Co., (E.34), Motor Vehicle Manufacturer's Association, (E.35), Sherwin Williams, (E.36), Getty Oil, (E.37) and Williams and Company, (E.38)

A blatant example of Bell's delaying tactics is illustrated by the case of J. Walter Thompson. This customer is located on the 23th floor of the John Hancock Building, and the MCI terminal is on the 93rd floor of the same building. On December 12, 1973, MCI requested a house pair running inside the building to connect the MCI and the customer. MCI was informed on December 19th that such an arrangement was "special" and would require six weeks just to price and an indefinite period before final installation. Bell was willing to give MCI a loop running from the 26th floor to the 16th floor, to the Superior Street Central office (a ½ mile distance), back to the 16th floor, and finally to MCI on the 93rd floor. The customer has indicated he would be extremely unhappy with this since it means more distortion for his data line. (E.39).

Another example of delay is Bell's practice of losing orders. The case of Smith-Barney involved a delay from November 15, 1973 when the order was placed by MCI for local distribution facilities to January 31, 1973 when the circuit was finally installed. (E.40)

Yet another means of delay has been Bell's refusal to provide service until tariffs were approved by the State Public Utility Commissions even though the Federal Communications Commission (FCC) notified Bell that interstate tariffs are to be filed with the FCC and not with the states. (E.41).

A final example of delay involves Kopper Maryland. On March 18, 1974, Bell placed its demark (interconnection device between Bell and MCI equipment) in the space requested by MCI but on March 21 moved it to a room 100 feet away. An additional two to three hours work was done by MCI to meet this demark. MCI complained to Bell about the situation; however, MCI had no choice but to wire to this demark since MCI had made a commitment to the customer to provide service on March 25, 1974. As the installation was nearing completion on March 25, 1974, Bell moved the demarcation point back to its original location, causing further expenditures of effort on the part of MCI and resulting in more lost time. (E.42).

Exhibit 1

SOUTHWESTERN BELL TELEPHONE COMPANY

The attached article appeared in Computerworld. Within two days after this article appeared, MCI's customer, Computer Dimensions Inc., was contacted by a Southwestern Bell representative who stated that Southwestern Bell had been reviewing Computer Dimensions' payments for the past two years and henceforth Computer Dimensions would have to give Southwestern Bell a two month deposit on all services.

John: Funny, how competition does strange things to Bell.

City: Dallas.

MCI Branch: Dallas.

MCI Rep.: Tom Richter.

Bell Assoc. Co.: Southwestern Bell.

Customer: Computer Dimensions, Inc.

MCI Type Service: 4E-Voice Dallas-Detroit.

Bell Type Service: Bell 4800 & 9600 Data.

When Ordered: 9-17-73.

When Refused:

Type of Problem (refusal, delay, poor service, etc.): Bell Harassment of MCI customer

Problem 12-31-73 4:30 p.m. CST.

The day after the attached article appeared in Computer World, Bell contacted Computer Dimensions regarding billing practices. Bell said, in effect, that C.D.I. payments for the past two years had been reviewed and that there is now reason to require C.D.I. to give Bell a two-month deposit on all their services.

James L. Flot, Administrative Assistant to the President of C.D.I., told me that all bills during the last year (with the exception of one) have been paid within 20-30 days. The November '73 bill was paid on December 20, 1973 and was "late" because of Bell's error on the bill.

Computer Dimensions feels that Bell's action is due to the announcement by Rob Frank in Computer World that C.D.I. will be using MCI's service.

THOMAS E. RICHTER.

NET NOW REACHES 14 CITIES—DALLAS USER EYES HIGH-SPEED MCI LINK

(By Ronald A. Frank)

DALLAS—MCI Telecommunications Corp. has added Dallas to its growing communications network which now reaches 14 cities.

As the first administrative message was printed out on a teletypewriter at the network's Dallas regional terminal, the specialized carrier was completing final plans to connect at least five data communications users to the MCI network.

One of the first data users is expected to be Computer Dimensions, Inc. which will use an MCI circuit between Dallas and its multiplexer site in Detroit.

Computer Dimensions will begin running 9,600 bit/sec data on the link as soon as it is available, according to Robert Smith, operations manager. The MCI circuit, a single voice-grade line, will be a test for the company, Smith said, and if the results are "as good as or better" than the present Bell System facilities, Computer Dimensions will probably order additional facilities from MCI.

Smith said he expects MCI service to begin shortly, adding that one of the few remaining requirements is for Southwestern Bell to supply the necessary local loops. On the Detroit end of his MCI link, the local loops are already in place, Smith said.

Computer Dimensions plans to keep its Bell link side-by-side with MCI's "for at least 30 days," Smith said, until he is satisfied with the reliability of the MCI line.

IMPORTANT LINK

The Detroit to Dallas route is an important part of the Computer Dimensions national data network. Data from up to 40 low-speed data customers as far east as New York comes into Detroit, where the firm has a General Data-Comm time-division multiplexer. The combined data stream is transmitted to the Dallas DP center at 9,600 bit/sec using Codex modems.

Smith said he has been satisfied with the performance of the Codex modems, and he is especially pleased with the dial back-up capability of the data sets. When the existing Bell 3002 voice-grade line goes down, the Codex modems are switched to a dial facility through a DAA.

Computer Dimensions has transmitted data up to "about an hour at 9,600 bit/sec on dial-up lines without major problems, Smith said. "But sometimes we have to dial a second time when the first connection sounds extra noisy," he explained.

The Computer Dimensions network handles a variety of applications, some of which are turnkey services provided by the firm to its DP customers. The company relies on its 360/65 in Los Angeles to process data that is transmitted from as far away as the East Coast.

Among its customers, Computer Dimensions serves beverage distributors, credit unions in Michigan, and a network of teletypewriter users who share some of the line capacity. One of the major applications is an auto parts inventory system. This service provides car dealers with inventory control for replacement parts.

Because Computer Dimensions provides services to customers with its data network, reliability is important and long outages cannot be tolerated. In this regard, Smith is interested in MCI's redundant local loop offering. This allows the user to get a second (or back-up) set of local loops at less than the cost of a local loop from Bell.

Under this set-up, the second local loop cannot be used regularly and must be held in reserve until the primary local loop goes down. The local loop has always been a vulnerable part of a specialized carrier link because only the phone company can do the repair and maintenance.

The user first informs his specialized carrier of a local loop problem and the specialized carrier then has to call the phone company. Often this process is time-consuming and MCI feels the second loop feature will help.

TROUBLE-REPORTING SYSTEM

While Smith is anxious to begin his MCI service, he admitted the reliability of a line is a hard thing to measure. After years of experience with military data communications systems, Smith has implemented an efficient trouble-reporting system on the Computer Dimensions network.

Using old Model 14 TTYs (which have strip printer output) all network administrative messages concerning outages, line problems, etc., are printed out. The tape from the strip printers is reviewed each week by Smith. He transforms the important items, together with critical data such as time of day and duration of the problem, into a permanent performance record. He will rely on this same system to evaluate the MCI line.

Exhibit 2

MCI TELECOMMUNICATIONS CORP.,
November 15, 1973.

Memorandum For: Larry Harris.
From: Bruce Marshall.
Subject: Young & Rubicam.

The attached memorandum concerning the subject account represents *my best knowledge* of the events which have occurred during the last six months. Specifically, the second paragraph in the section labeled "Recent Developments" includes information obtained from Lee Caputi and provided to me on a confidential basis. She would not elaborate on any of the details associated with the AT&T and New York Telephone Co. involvement and indicated that there were some aspects on which she could not elaborate.

The "Summary" section should be re-emphasized in that we have not received a cancellation at this time. Any outside reference to this situation could have serious implications with respect to the order, but, more importantly, to individuals associated with Young & Rubicam.

If I can be of assistance in clarifying any of the points outlined in the memorandum, please call me at the Newark office.

Regards,

B.R.M.

NOVEMBER 13, 1973.

Memorandum to File
From: BRM.
Subject: *Young & Rubicam*, Order No.'s I4030140 and I4030141.
Background of Order.

On May 10, 1973 Karen Miller, who was then Manager of Telecommunications, issued a letter of intent on behalf of Young & Rubicam to install two circuits, NY/Chi, and one circuit, NY/Det. Her boss, Frank Coppola (Vice President,

Administrative Services), was copied on the letter of intent. He also attended a half day seminar in New York on June 5, 1973 conducted by the P P & N Industry Team. The seminar included the MCI Story, talks by Mr. Cox, Mr. McGowan and an open forum for questions.

Karen Miller was replaced by Lee Caputi on June 4, 1973. The P P & N group set up an immediate meeting to discuss the order and present the MCI Story to her. The order was confirmed and submitted on June 27, 1973. Site surveys were conducted at each location. Local loops and MCI equipment were ordered and a letter of agency was obtained from Ms. Caputi in early October to coordinate the discontinuance of the A T & T circuits. On October 24, 1973 Ms. Caputi attended the New York City opening and toured the MCI terminal.

In short, the order was in hand; the installation was under control (dates were scheduled); the politics of the account appeared to be under control.

Background of the Problem

It was known by the P P & N Industry Team that Young & Rubicam was the ad agency for New York Telephone. We discussed the matter with Lee Caputi on several occasions and she assured us that there was no problem since MCI was not affecting New York Telephone revenue directly. However, the matter was considered wise by all not to emphasize the Young & Rubicam account under the circumstances.

Recent Developments

In the October 29, 1973 issue of Electronics News, an article appeared concerning the New York City opening of October 24. In the article reference was made to several MCI customers, including "Young & Rubicam, Advertising Agency". It appears that the EN reporter, Ron Schneiderman, toured the terminal area and saw Y & R's name on the tagged local loops. I contacted Lee Caputi* after reading the article and informed her of the same and that MCI had not sanctioned the referenced customers. At that time, there did not appear to be a problem.

It now appears that someone from A T & T noticed the article and knew that Y & R was the ad agency for NY Telephone. He, in turn, notified the advertising department of the situation. NY Telephone (no names available) contacted the Y & R account representative and asked for a meeting to discuss the matter. Lee Caputi was notified on November 5, 1973 to prepare a presentation for November 6 on MCI and why Y & R should go with the MCI service and jeopardize a \$4.9 million account. Although no one ever specifically indicated that NY Tele would switch agencies, the implication was very obvious.

NY Telephone participated in the presentation and recommended that Y & R re-evaluate the tie-lines in general and whether or not Y & R's WATS lines could carry the extra capacity. Y & R's upper management has asked Ms. Caputi to ask for a thirty day delay in the MCI installation to evaluate their WATS usage. Several significant points should be outlined:

1. NY Tele receives all credit for WATS service and none for AT&T Long Lines service.
2. There is no direct competition to WATS.
3. They have created a delay situation by recommending another alternative, rather than forcing a cancellation now.
4. A forced cancellation under the circumstances may have been detrimental in the case against A T & T, which is now in process.

MCI Action:

1. New York, Chicago and Detroit branch managers have been notified that there is to be no customer contact without prior approval of the P P & N Industry Team.
2. The installations have been delayed for thirty days in order to allow Y & R to finalize their decision.

Summary

MCI is in a very sensitive political situation. Ms. Caputi is our strongest ally and supporter and is probably why the order has not been cancelled. Any reference to this situation outside of MCI must be done so cautiously or we may trigger the cancellation and/or result in the dismissal of Lee Caputi.

YOUNG & RUBICAM.

* On November 1, 1973

NEW YORK, N.Y., May 10, 1974.

Mr. BRUCE R. MARSHALL,
MCI Telecommunications Corp.,
New York, N.Y.

DEAR MR. MARSHALL: It is the intent of Young & Rubicam to have MCI Telecommunications Corporation provide the following services to Chicago, Illinois and Detroit, Michigan commencing approximately on the indicated dates.

Quantity	MCI service	From	To	Date	Monthly	Charge
2	4K plus voice P/T	New York	Chicago	September 1973	\$1,440	¹ \$720
1	do	do	Detroit	do	585	

Note: ¹ Each installation charge \$50 per terminal, \$300 total.

We understand that these rates will be adjusted downward if AT&T were to offer comparative service at a similar or reduced charge.

Very truly yours,

KAREN L. MILLER,
Manager, Telecommunications.

YOUNG & RUBICAM,
New York, N.Y.

Ms. McLOUGHLIN,
American Telephone & Telegraph Co.,
Long Lines Department,
New York, N.Y.

DEAR Ms. McLOUGHLIN: This letter is to advise you that we have designated the MCI Telecommunications Corporation as the agent for coordinating the discontinuance of the following Long Lines services: Circuit FP019502001251, Circuit FP019502002252, Circuit FP021775250.

MCI Telecommunications Corporation shall have no billing obligations to you with respect to these services.

Sincerely yours,

LEE CAPUTI,
Manager—Telecommunications.

ACTIVATED BY MCI—OPENS N.Y.—CHICAGO LINK

(By Ron Schneiderman)

NEW YORK—MCI Telecommunications put another nick in American Telephone & Telegraph's Long Lines trunks last week when it activated its New York to Chicago end-to-end voice, data, facsimile and teleprinter service.

MCI Telecom's first link, opened early last year between Chicago and St. Louis, by AT&T's own estimates has already captured 80 per cent of the Bell System's long distance services between the cities.

Significantly, 40 per cent of MCI Telecom's new private line customers between Chicago and St. Louis are businesses that formerly relied exclusively on Bell System long distance telephone toll calls between the two cities.

"That's what scares the hell out of them," William G. McGowan, chairman and chief executive of MCI Telecom, said here last week. "AT&T is only accustomed to operating as a monopoly."

Among the customers which MCI Telecom picked up between New York and the Midwest last week were Control Data's Service Bureau; Pfizer; Holiday Inn; Witco, and Young & Rubicam, advertising agency.

A Service Bureau spokesman last week said "The MCI link we have is a single line from New York to Cleveland which we have had just since last week on a trial basis. We're just looking at it."

The Federal Communications Commission, meanwhile, last week reaffirmed its position that AT&T must file its tariffs for local distribution services for specialized common carriers with the commission and not the state regulatory agencies.

The Commission said that AT&T's plan to file such tariffs with the state regulatory commissions appears to be in direct conflict with the statutory scheme of the Communications Act.

The FCC's position was contained in an Oct. 4 letter signed by Dean Burch, commission chairman.

"We think this is very significant," Mr. McGowan said, "since the chairman usually doesn't sign anything like this. Most correspondence from the FCC is signed by one of the department lawyers."

ENTITLED

Bernard Strassburg, chief of the FCC's Common Carrier Bureau, last week informed MCI Telecom that the commission has "made it clear (to AT&T) that specialized carriers are entitled to such interconnection facilities as are necessary to enable such carriers to furnish the services they are authorized to perform.

"Accordingly," Mr. Strassburg's letter continued, "we confirm that MCI and/or its customers are authorized to secure from the telephone company serving the area the various types of local interconnection required for all of the services" which the commission originally authorized MCI to perform.

Mr. McGowan said that within 3 months, MCI Telecom will link 20 major U. S. cities to form its national business communications network. The final link, to Los Angeles, is expected to be made in January.

Currently, there are applications before the FCC from 10 major specialized common carriers to build and operate private line systems serving some 200 cities in 43 states.

MCI TELECOMMUNICATIONS CORP.

NOVEMBER 7, 1973.

Memorandum For: John Antanies, Fred Noble and Dick Reaser
From: Dick Doelger
Subject: Young & Rubicam, Inc.

No MCI personnel are to contact subject account without prior approval of the P P & N Industry Team (202) 643-4535 until further notice. We are having an emergency meeting with the customer on November 8, 1973 to discuss some extenuating circumstances.

R. J. D.

Exhibit 3

City: New York City.

MCI Branch: Chicago.

MCI Rep.: Thomas Knight.

Bell Assoc. Co.: New York Telephone

Customer: Harris Trust.

MCI Type Service: Voice—Chicago—New York.

Bell Type Service: Voice—Chicago—New York.

When Ordered:

When Refused:

Type of Problem (refusal, delay, poor service, etc.): Unauthorized Service Cut.

Problem: 1-7-74, 9:00 A.M. (E.D.T.).

On the above date, MCI was installing service between Chicago and New York. We were to run in parallel with AT&T for several days so the customer could be assured our line was working well before disconnecting AT&T. At about 9:00 A.M. on January 7, 1974 the AT&T line was disconnected although no disconnect orders had been issued by the customer. It is *believed* New York Telephone issued the order. The customer immediately asked for service restoral. As of 3:00 P.M. on 1/10/74, the service had not been restored. Customer advised Bell to forget about service restoral since MCI's line was working well.

THOMAS KNIGHT.

Exhibit 4

City: Towson, Maryland.

MCI Branch: Towson.

MCI Rep.: Warren Davis.

Bell Assoc. Co.: Chesapeake and Potomac Maryland.

Bell Rep.: Russ Cooney.

Customer: Maryland Cup.

MCI Type Service: Ring Down.

Bell Type Service: Same.

When Ordered: N/A.

When Refused: N/A.

Type of Problem (refusal, delay, poor service, etc.): Under-Cutting.

Problem: 01-07-74, 1400.

Mrs. Muriel Lutz called and stated she wanted MCI to stop all action on MY1229001 (14080269) and service to NYC. Reason: C & P salesman called on her and explained Hi-Low service and proved that "Bell" would be less expensive than MCI for this service. Larry Ingham (CSR) received this call, as I was in a meeting in Philadelphia. Word passed to DC office for Rich DeRose (Salesman) to act on.

WARREN DAVIS.

Exhibit 5

City: Pittsburgh.

MCI Branch: Pittsburgh.

MCI Rep: R. Uhlhorn.

Bell Assoc. Co.: A.T.& T.

A.T.& T. Rep.: D. Wolf

Customer: Pittsburgh Plate Glass.

MCI Type Service: 2-Way Dial Repeat Tie Trunks.

Bell Type Service: C.O. Centrex.

Type of Problem (refusal, delay, poor service, etc.): General delaying tactics and an attempt to confuse customer.

Mr. Basom (Comm. Manager for PPG) has for years had only to call his A.T.& T. rep. for his USSO #'s. However when he called for USSO #'s so that he could order connection of MCI circuits and disconnect of A.T.& T. circuits he was told to submit the request in writing. Mr. Basom's A.T.& T. rep. also told him that it would be necessary for him to obtain a local Bell interconnect number which has not been necessary in the past and is apparently not necessary now.

MCI TELECOMMUNICATIONS CORP.

Washington, D.C., February 26, 1974.

Memorandum To: Ken Cox; Larry Harris; John Worthington.

From: Bill McGowan.

Re: Antitrust.

A new tactic of AT&T's was mentioned to me by Carl Vorder Bruegge yesterday.

MCI has started to install a large number of circuits for PPG, a customer who is happy with our service and who has rebuffed Bell's attempts to discourage installation by delays.

This past week, Bell has started a new hassle. For years they have accepted verbal instructions from this particular communications manager (as is standard for the industry and is still standard for all other customers) for any and all orders, modifications, cancellations, etc. They now have notified him that everything must be done in writing.

MCI TELECOMMUNICATIONS CORP.

January 9, 1974.

Memorandum For: Larry Harris.

From: Carl Vorder Bruegge.

Subject: Bell Telephone.

Al Basom related to me the following facts today. These facts are a perfect example of Bell Telephone damaging MCI by predatory practices and should be the basis of a letter to Pennsylvania Bell, A.T.& T. and a copy to the Department of Justice.

For years Al has ordered connections and disconnections from A.T.& T. orally. Yesterday, January 8, Al endeavored to order a disconnection of a private line from Detroit to Toledo in order to get the SSO number for MCI to get Bell to connect us on a replacement basis. Al was told that he would have to request this disconnection in writing in order to get the SSO number which resulted in several days delay of installation of the circuit and loss of revenue to MCI.

Exhibit A

ILLINOIS BELL,
Chicago, Ill., October 18, 1973.

Ms. D. LEWIS,
Local Loop Coordinator,
MCI Telecommunications Co.,
Chicago, Ill.

Ms. LEWIS: This is in reply to your request of October 15, 1973 for a facility terminating at the premise of Nebraska Consolidated Communications Corporation (NCCC) on the 41th floor of 20 North Wacker Drive.

We have contacted NCCC, also a company engaged in interstate common carrier service, and they have indicated their intention to connect this facility to their interstate transmission system. Such a connection constitutes transiting and not local distribution and is not part of our contractual obligation with your company. Therefore, the facility described herein will not be provided.

P. I. OVERMYER,
Staff Supervisor.

Exhibit 7

City: Chicago.
MCI Branch: Chicago.
MCI Rep.: Dee Lewis.
Bell Assoc. Co.: IBT.
Bell Rep.: Dan Kocher.
Customer: J. Walter Thompson.
MCI Type Service: Multipoint Data.
Bell Type Service: A house pair.
When ordered: 12/12.
Type of problem (refusal, delay, poor service, etc.): Delay.
Problem: 12/29.

The customer is located on the 26th floor of J. Hancock Bldg., MCI terminal is on the 93rd floor of the same building. We requested a house pair on 12/12 to connect the two from Bell and was informed on 12/19 that such an arrangement was "special" and would require 6 weeks just to price and an indefinite period toward final installation. They offered to give us a "normal loop" which would run from the 26th floor, to the 16th floor, to the Superior St. Central office (a ½ mile distant), back to the 16th floor, and finally to the 93rd floor. The customer has indicated he would be extremely unhappy with this arrangement since it means more distortion for his data line. Furthermore, on 12/7, at the time of the site survey the customer stated that he would seek his own legal counsel if Bell refused to comply with his wish to stay within the building. Coincidentally, on January 4th, we sent a letter to Bell stating our understanding that the loop would be ready Jan. 9th and asking for their comment if they felt it wouldn't be. They did not respond. The promised installation date of 1/17 now seems out of the question.

ROBERT G. WHITE.

City: Chicago.
MCI Branch: Chicago.
MCI Rep.: Dee Lewis.
Bell Assoc. Co.: Illinois Bell.
Bell Rep.: Dan Kocher.
Customer: J. Walter Thompson.
MCI Type Service: Multipoint Data.
Bell Type Service: A House pair.
When Ordered: 12/12/73.
Type of Problem (refusal, delay, poor service, etc.): Delay.
Problem: 1/11/74, 2:30 P.M.

Called Dan Kocher and requested that he expediate the installation of the house pair loop for J. Walter Thompson on the basis of it not leaving the Hancock Building and making our due date of January 17th. Mr. Kocher said he would try to do whatever was possible, and if he was successful, we should not consider this a regular practice. We will keep this report open pending Bell's completion of the loop installation.

J. ANTANIES.

MCI TELECOMMUNICATIONS CORP.,
Washington, D.C., January 11, 1974.

Mr. CHARLES L. BROWN,
President, Illinois Bell Telephone Co.,
Chicago, Ill.

DEAR MR. BROWN: During the hearing on MCI's request for a preliminary injunction in the United States District Court for the Eastern District of Pennsylvania on November 15-16, 1973, Mr. F. J. Woods of AT&T stated that AT&T would be willing to permit transitting between two or more common carriers. Also, On November 26, 1973 AT&T represented in their Proposed Findings of Fact and Conclusions of Law that AT&T would permit transitting facilities to interconnect the local terminal facilities of one or more specialized carriers.

Despite these representations, Mr. Phil Overmyer of your company told MCI that there had been no change in Illinois Bell's position not to furnish MCI with these transitting facilities to interconnect MCI's and N-Triple-C's terminals in Chicago. Mr. Overmyer stated that Illinois Bell's position concerning transitting remains exactly as stated in their letter of October 18, 1973 (see Attachment I). [Omitted.]

Illinois Bell Tariff No. 35 filed with the Federal Communications Commission to become effective January 11, 1974 and Illinois Bell Tariff Illinois C. C. No. 1 both specifically exclude transitting:

"The facilities furnished are provided to the OC solely for the purpose of local distribution and shall not be connected by the OC in any manner as to create or become a portion of a circuit which transits (does not terminate in) a local distribution area..."

I am sure you are aware that on December 31, 1973 the United States District Court in Philadelphia granted MCI injunctive relief against AT&T. The court's ruling requires all Bell System telephone companies immediately to provide MCI with interconnection for its nationwide business communications network on a basis equal to the interconnection these companies provide to Bell's own Long Lines Department.

Not only has Illinois Bell not done what your witness Mr. Woods stated and your attorneys represented in your filed Proposed Findings of Fact and Conclusions of Law in the District Court hearing, but your company appears to be in violation of the District Court's order. I have enclosed a copy of the Court's order for your information. I would appreciate hearing from you upon receipt of this letter on what action you are taking to expedite the correction of the harm done to MCI by Illinois Bell's conduct. Because of Illinois Bell's failure properly to work with MCI for the provision of interconnections, MCI has been unable to offer our customers services we are authorized to provide. As you can well imagine, the financial damage to MCI as a result of Illinois Bell's past actions and policies as well as the image damage to MCI in the eyes of its customers and potential customers has been substantial.

I am confident that Illinois Bell's future actions will be in full compliance with the District Court order and that you will respond in writing as to what corrective action you are taking. I know that I can now look forward to an era of full cooperation between our companies for our mutual benefit and for the benefit of our customers.

Very truly yours,

LAURENCE E. HARRIS,
Vice President.

Exhibit 7

MEMORANDUM

MCI TELECOMMUNICATIONS CORP.,
September 24, 1974.

For: Bill McGowan.
From: Larry Harris.
Subject: Interexchange facilities.

Bell continues to offer its Long Lines Department and Western Union interexchange facilities while denying the same to MCI.

I have been in discussion with AT&T on this matter for the past ten months. While AT&T verbally states that they will treat MCI and Western Union

equally, each time we request the same type of interconnecting facilities (IXC) that Western Union receives we are turned down.

As recently as Friday, September 21, Mr. Charlie Jackson of AT&T restated AT&T's position that they do not intend to offer the specialized carriers IXC facilities until the Commission approves AT&T's request for the Hi Lo tariff filing.

However, both AT&T's Long Lines Department and Western Union continue to be able to buy interexchange facilities and thereby are able to serve a wider service area than are MCI and the other specialized carriers.

Exhibit 8

INDIANA BELL,

Indianapolis, Ind., January 2, 1974.

Mr. ERNEST M. CUZZOCREO,
Manager, MCI Telecommunication Corp.,
South Bend, Ind.

DEAR ERNIE: This letter is to confirm our discussion in Indianapolis on December 28, 1973 regarding the expansion of the South Bend - Osceola Local Distribution Area (LDA) as presently enumerated under Indiana Bell tariffs on file with the Public Service Commission of Indiana.

As a result of a recent review of the decision process used in determining this LDA, including additional discussions with Michigan Bell Telephone Company personnel, we do not intend to expand the area.

Obviously as a result of this decision, we are unable to provide local distribution facilities to the Simplicity Pattern Company, Inc. of Niles, Michigan as requested in their letter dated December 6, 1973 and as forwarded to me by you on that same date.

If you have any questions, please call.

Sincerely,

JACK TRUITT,
Marketing Staff Supervisor.

City: South Bend, Indiana.

MCI Rep.: E. M. Cuzzocreo.

Bell Assoc. Co.: Indiana.

Bell Rep.: J. Truitt.

Customer: Simplicity Pattern.

MCI Type Service: Man Ring Tie Trunk (2).

Bell Type Service: Cable facilities and trunk equipment.

When Ordered: 12/5/73 11 :A.M.

When Refused: 12/28/73 11 :A.M.

Type of Problem (refusal, delay, poor service, etc.): Refused service and delayed notifying MCI.

Problem: 12-28-73.

Met with J. Truitt of Indiana Bell and was informed they will not give us the Simplicity Pattern circuits. They consider this an extension of the L.D.A. Yet in the meeting of 11-29-73 Jim McNabb's memo dated 11-29-73 Item 3 and 4 they agreed and would handle all intercompany arrangements.

E. M. CUZZOCREO.

Exhibit 9

City: St. Louis, Missouri.

MCI Branch: St. Louis.

MCI Rep.: A. R. Becker.

Bell Assoc. Co.: SWBT Co.

Bell Rep.: C. Barenkamp.

Customer: A. C. F. Industries.

MCI Type Service: Two-way manual ringdown.

When Ordered: 01-31-74 1:30 P.M. CDST.

When Refused: 01-31-74 1:30 P.M. CDST.

Type of Problem (refusal, delay, poor service, etc.): Refusal.

Problem: 01-31-74 1:30 P.M. CDST.

This circuit is a new order that was telephoned to the SWBT Rep. (C. Barenkamp). Mr. Barenkamp said he would accept the order verbally and that I could send him a written confirmation but that no action would be taken on it till this "thing" was settled, as the customer is out of the local distribution area.

A. R. BECKER.

Exhibit 10 ~

City : St. Louis, Mo.
 MCI Branch : St. Louis.
 MCI Rep. : A. R. Becker.
 Bell Assoc. Co. : Southwestern Bell.
 Bell Rep. : C. Barenkamp.
 Customer : A.C.F. Industries - Pfizer.
 Problem : 2-20-74 2:45 P.M.

Placed a call to C. Barenkamp (SWBT Rep) to inquire about status of circuits to A.C.F. Industries and Pfizer Co. Both circuits had previously been refused by SWBT as being out of LDA. He reported the results of the court decision did not arrive at their place until 2:00 P.M. yesterday. He said the court decision and how it affects these circuits is presently being studied and that he would call me later today or the first thing tomorrow with a status report.

A. R. BECKER.

City : St. Louis, Mo.
 MCI Branch : St. Louis.
 MCI Rep. : A. R. Becker.
 Bell Assoc. Co. : SWBT.
 Bell Rep. : C. Barenkamp.
 Customer : A.C.F. Industries & Pfizer, Inc.
 Problem : 2-21-74 4:00 P.M.

Called the SWBT rep. (C. Barenkamp) this P.M., and he reported they will give us loops and interconnects to Pfizer in East St. Louis, Illinois and also to A.C.F. Industries in St. Charles, Missouri. He also reported they hope to have the details worked out tomorrow and can then give me some dates. He requested that I send him a new order or cancellation on two previous orders for Perfection Photo in St. Charles, Missouri and Santa Fe Pipe Line in St. Peters, Missouri.

A. R. BECKER.

City : St. Louis.
 MCI Branch : St. Louis.
 MCI Rep. : Becker.
 Bell Assoc. Co. : SWBT.
 Bell Rep. : Barenkamp.
 Customer : ACF Industries & Pfizer, Inc.
 Problem : 2-25-74 9:13 A.M.

Received a call from SWBT (Barenkamp). He advised me he was attending a meeting this morning at 10:00 on how Telco was going to get us service to ACF Industries in St. Charles, Mo. and Pfizer, Inc. in East St. Louis, Ill.

A. R. BECKER.

City : St. Louis.
 MCI Branch : St. Louis.
 MCI Rep. : Becker.
 Bell Assoc. Co. : SWBT.
 Bell Rep. : Barenkamp.
 Customer : ACF Industries & Pfizer, Inc.
 Problem : 2-27-74 10:40 A.M.

Called SWBT (Barenkamp) for up-date on ACF Industries and Pfizer, Inc. service dates. He reported they are working on how they will give us service to those customers.

A. R. BECKER.

City : St. Louis.
 MCI Branch : St. Louis.
 MCI Rep. : Becker.
 Bell Assoc. Co. : SWBT.
 Bell Rep. : Barenkamp.
 Customer : ACF Industries & Pfizer, Inc.
 Problem : 2-28-74 2:20 P.M.

I have just called Scott Brodey and advised him that SWBT is dragging their feet on giving me a service date for ACF Industries in St. Charles, Mo. and Pfizer, Inc. in East St. Louis, Ill. These circuits were previously out of the LDA. Scott said he will contact SWBT and escalate the problem.

A. R. BECKER.

EXHIBIT 11.—EXAMPLES OF MCI CUSTOMERS WHO HAVE ORDERS FOR CIRCUITS THAT TERMINATE IN PENNSYLVANIA THAT ARE ON HOLD DUE TO A BELL INTERCONNECTION POLICY PROBLEM (OTHER THAN THE FACT THAT BELL WENT TO THE PUC)

Account	Service	From	To	Comments
Thiokol	FX	Philadelphia	Washington	FX service.
Do	Do	Baltimore	Washington	FX service.
Hercules	Voice	Philadelphia	Cleveland	Hubs out of Wilmington, Del.
Hewlett Packard	Voice	Newark	Philadelphia	Hold on service—outside of exchange—Paramus, N.Y. (IXC-265) area code—201.
Applied Logic	Data	Newark	Philadelphia	Hold on service—outside of exchange—Princeton, N.J. (Served out of Philadelphia) (IXC-924) area code—609.
Management Science Associates, Inc.	Voice	Pittsburgh	Chicago	Hold on service—outside of exchange—Des Plaines, Ill. (IXC-298) area code—312.
Westinghouse	CCSA	Pittsburgh	Los Angeles	CCSA service.
Chilton	FX	Philadelphia	Cleveland	Refused alternate FX service (private line with "switch" for FX. Same application as alternate voice/data.

Exhibit 12

Examples of customers for which orders have been placed with the telephone company and have been rejected by the telephone company

Customer name and location:	Reason for rejection
1. Hewlett Packard, Rockville, Md...	Out of DC LD area.
2. Litton Ind., Reston, Va.....	Do.
3. Lever Bros., Hammond, Ind.....	Out of Chicago LD area.
4. Computer Sciences, Elmsford, N. Y.	Out of New York LD area.
5. American Cyanimid, Wayne, N.J....	Out of Newark LD area.
6. Perfection Photo, Greensberg, Pa....	Out of Pittsburgh LD area.
7. Vought Elec. (LTV), Syosset, N. Y...	Independent Telco territory.
8. Reliance Electric, Philadelphia, Pa...	Centrex station connection.
9. Getty Oil, Philadelphia, Pa.....	PBX dial tie trunk connection.
10. Rothschild, Philadelphia, Pa.....	Ring dn. key eg. connection.
12. Westinghouse, Chicago, Ill.....	CCSA—access lines.

Exhibit 13

City : Washington.

MCI Branch : Washington.

MCI Rep. : Andy Fulton.

Bell Assoc. Co. : C&P Washington.

Bell Rep. : John Everett.

Customer : The Southland Corp.

MCI Type Service : Voice Grade Data.

Bell Type Service : 4 wire loop only.

When Ordered : 1/25/74.

When Refused : 1/29/74.

Problem : 1/30/74.

This loop order is out of the Washington local distribution area — D/E is Falmouth, Va. Mr. Everett advised me that his initial inquiry to his headquarters people was negative. They refused to authorize the order.

John Everett said he has gone ahead and issued the order to the field so that work will not be held up if decision is reversed.

Nelson Boyd talked with Mike Bradley—order will be processed but not connected until policy decision (court case) is resolved.

ANDY FULTON.

TELCO FACILITY REQUISITION

DATE

INQUIRY <input type="checkbox"/>	ORDER <input checked="" type="checkbox"/>	TYPE OF ORDER <input type="checkbox"/>	NEW <input type="checkbox"/>	CHANGE <input type="checkbox"/>	REMOVE <input type="checkbox"/>	HOT CUT <input type="checkbox"/>	TELCO USE ONLY	
PURCHASE DER 10000047	MCI CIRCUIT NOS. 1032-010						ORD. NO.	
LATED ORDERS	DATE FACILITIES DESIRED 2-7-74	DATE TELCO EQUIP. TERM. DESIRED	CKT. NO.					
STREET MCI TERM 1150 17th St. NW Washington, DC		CITY	FLOOR 11th floor	ORIG.				
NAME MCI CONTACT Andy Fulton		TITLE Customer Service Coordinator	572-1000	102	TEL. NO.			
CUSTOMER NAME & ADDR. The Southland Corp. P.O. Box 5355, US Highway 17, Falmouth, Virginia		2nd flr.						
CUSTOMER CONTACT Ray Scott		703-371-5000						

VOICE GRADE: REGULAR <input checked="" type="checkbox"/> NOMINAL <input type="checkbox"/>	DEMARC LOCATION 2nd floor telephone	USAGE <input type="checkbox"/> VOICE <input type="checkbox"/> DATA <input checked="" type="checkbox"/> ALTERNATE
IF REGULAR, EFFECTIVE: 2W <input type="checkbox"/> 4W (FDX) <input checked="" type="checkbox"/>	EQUIPMENT ROOM	
CONDITIONING: NONE <input checked="" type="checkbox"/> C1 <input type="checkbox"/> C2 <input type="checkbox"/> C4 <input type="checkbox"/>		
1. CHANNEL ACCOMMODATION REQUESTED FROM TELCO NONE <input checked="" type="checkbox"/> DX <input type="checkbox"/> LOOP <input type="checkbox"/>		USOC CODE
2. APPLIED TO LOOP AT MCI TELCO DEMARC NONE <input checked="" type="checkbox"/> SF <input type="checkbox"/> DX <input type="checkbox"/> LOOP <input type="checkbox"/>		
3. SIGNALING PATH IF DX OR LOOP 4W SIMPLEX <input type="checkbox"/> TRANSMIT PAIR <input type="checkbox"/> REC. PAIR <input type="checkbox"/>		

COAM <input checked="" type="checkbox"/>	TELCO KEY SYSTEM <input type="checkbox"/>	TELCO PBX <input type="checkbox"/>	DEMARC LOCATIONS
NO. OF STA. 3/A	STATION APP. LOCATIONS	INTERCONNECT SKETCH NO.	
APPEARANCES PER CKT.			
TYPE OF PBX N/A ACCESS CODE JACK NOS.			
1. MAN. RING TIE TRK <input type="checkbox"/>	4. 2 WAY DIAL RPTG. TIE TRK <input type="checkbox"/>	5. C.O. PBX TRK <input type="checkbox"/>	6. STA. LINE CKT <input type="checkbox"/>
2. AUTO RING TIE TRK <input type="checkbox"/>	E & M <input type="checkbox"/> DX <input type="checkbox"/>	GROUND STR. <input type="checkbox"/>	GROUND STR. <input type="checkbox"/>
3. OTHER (SEE ADJUT. INTOL) <input type="checkbox"/>	4W (PDSW) <input type="checkbox"/> 2W <input type="checkbox"/>	LOOP STR. <input type="checkbox"/>	LOOP STR. <input type="checkbox"/>
TELCO TO PROVIDE COMMON GROUND <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO			

Please provide one 4-wire loop to the above shown address and terminate in a 42A block on back wall of telephone equipment room (2nd floor). If this loop will utilize N carrier please confirm that the channel is noncompandered.

PLEASE FORWARD APPLICABLE INSTALLATION AND MONTHLY CHARGES TO CUSTOMER SERVICE MANAGER AT ABOVE MCI ADDRESS.			
INSTALL. CHARGES \$	MONTHLY CHARGES \$	TELCO M.P.S. APPROVAL	
LINE MILLS	TELCO EXT. NO.	LOOP COMPL. DATE	TELCO INT. COMPL. DATE

COPY 01 - TELCO
COPY 02 - RETURN TO MCI
COPY 03 - BRANCH FILE

MCI APPROVED

JANUARY 4, 1974.

SALES MANAGER,
American Telephone and Telegraph Co.

DEAR SIR: The undersigned appoints MCI Telecommunications Corporation, or any of its affiliated companies, as agent (the "Agent") to order changes to and maintenance on specific telecommunications service you provide to the undersigned including, without limitation, removing, adding to, or rearranging such telecommunications service. This specific service is one (1) voice grade tie line between Dallas and Falmouth, Va. (circuit number _____). Appropriate charges should be billed to The Southland Corporation, 2828 N. Haskell Ave., Dallas, Texas 75221.

1 "Affiliated Companies" refers to Interdata Communications, Inc. MCI-New York West, Inc., Microwave Communications, Inc., and MCI St. Louis-Texas, Inc.

You are hereby released from any and all liability for making pertinent information available to the Agent and for following the Agent's instructions with reference to any changes to or maintenance on the undersigned's telecommunications service.

You may deal directly with the Agent on all matters pertaining to said telecommunications service and should follow its instructions with reference thereto. This authorization will remain in effect until otherwise notified.

Yours truly,

R. R. BROUGH,
*Director of Management Information Systems,
The Southland Corp.*

Exhibit 14

NEW YORK TELEPHONE COMPANY

On December 3, 1973 the New York Telephone Company restated their policy that they would not provide MCI customers outside of their pre-determined local distribution area (see attached letter).

In this December 3, 1973 letter, New York Tel went on to state that they would not allow MCI "connection of an unrestricted station to a Centrex or PBX equipped DID or AIOD features utilizing Other Common Carriers in providing intercity facilities." Therefore, New York Tele continues to reguse to supply MCI unrestricted off premises stations (OPS service).

NEW YORK TELEPHONE,
New York, N.Y., December 3, 1973.

Mr. R. R. REASER,
*MCI Telecommunications Corp.,
New York, N.Y.*

DEAR MR. REASER: As you have requested, this letter advises why we have declined to process certain facility orders received from your company.

In our recently filed State and FCC tariffs for Other Common Carrier facilities which your company has agreed to on an interim basis pending review by the respective Commissioners, the Local Distribution Area for New York City is defined as:

"The local distribution area of each of the zones of the New York Metropolitan Exchange Area, within New York City, is comprised of New York City, and with respect to each such zone, the primary calling area for message rate service of each such zone."

We are returning your orders for facility connections between your offices in New York City and Bethpage, Elmsford and Westbury since these locations are outside the LDA boundaries of New York City.

Our Company is not willing to undertake the connection of an unrestricted station to a Centrex or PBX equipped with DID or AIOD features utilizing Other Common Carrier-provided intercity facilities. We will connect OPS to PBX systems restricted from DID or AIOD in which case the attendant completes incoming and outgoing calls provided the tariff regulations governing such connections are met, i.e., a patron's communications requirement exists at each point of interconnection.

We are returning two orders for unrestricted off-premises stations (OPS service).

We are also declining to accept your suggested form Letter of Agency, Initial Service. We find the contents too broad to meet the conditions that a customer may desire to authorize MCI to act as their agent. We suggest that the customer on his letterhead authorize MCI to act as his agent for a specific service for a certain duration; also, indicating specifically the extent of the orders for which he wants MCI to represent him. A statement of the customer's acceptance of any charges involved should be included.

Should you have any questions on these matters, Mr. E. F. Lafferty on 394-4355 is familiar.

Sincerely,

A. R. VAN PETTEN.

Enclosures.

10/31/77
TUESDAY

MCI TELECOMMUNICATIONS CORP.,
November 6, 1973.

Thank you.

MCI

FORM M-330 1

TELCO FACILITY REQUISITION

DATE OCT. 26, 1973

INQUIRY <input type="checkbox"/>	ORDER <input checked="" type="checkbox"/>	TYPE OF ORDER <input checked="" type="checkbox"/>	NEW <input checked="" type="checkbox"/>	CHANGE <input type="checkbox"/>	REMOVE <input type="checkbox"/>	HOT CUT <input type="checkbox"/>	TELCO USE ONLY
PURCHASE NO. <u>0063</u>	MCI CIRCUIT NOS. <u>MD1050 001</u>	DATE FACILITY DESIRED <u>NOV 21 1973</u>	DATE TELCO EQUIP. TERM. DESIRED	ORD. NO. _____			
RELATD ORGNS	STREET <u>1301 Av of Amer</u>	CITY <u>NYC</u>	STATE <u>NY</u>	ZIP <u>10019</u>	CKT. NO. _____		
MCI TERM	NAME <u>ANGELO WIDER</u>	CSR <u>582 6520 210</u>	FLOOR _____				
MCI CONTACT	NAME <u>ANGELO WIDER</u>	CSR <u>582 6520 210</u>	TEL. NO. _____				
CUSTOMER NAME & ADDR. <u>Computer Science Corp 855 EXECUTIVE BLD ELMSTON N.Y</u>	FLOOR _____						
CUSTOMER CONTACT <u>FRED TURBE</u>	TEL. NO. <u>914-592 4080</u>						

MCI CIRCUIT NO.	FACILITY SCALE	VOICE GRADE: REGULAR <input checked="" type="checkbox"/> NOMINAL <input type="checkbox"/>	DEMARC LOCATION: <u>Ground floor</u>	USAGE
		IF REGULAR, EFFECTIVE: 2W <input type="checkbox"/> 4W (FDX) <input checked="" type="checkbox"/>	<u>COMMUNICATIONS ROOM</u>	<input type="checkbox"/> VOICE
		CONDITIONING: NONE <input type="checkbox"/> C1 <input type="checkbox"/> C2 <input type="checkbox"/> C4 <input type="checkbox"/>		<input checked="" type="checkbox"/> DATA
1. CHANNEL ACCOMMODATION REQUESTED FROM TELCO. NONE <input checked="" type="checkbox"/> DX <input type="checkbox"/> LOOP <input type="checkbox"/>			USOC CODE	
2. APPLIED TO LOOP AT MCI/TELCO DEMARC: NONE <input checked="" type="checkbox"/> SF <input type="checkbox"/> DX <input type="checkbox"/> LOOP <input type="checkbox"/>				
3. SIGNALING PATH IF DX OR LOOP: 4W SIMPLEX <input type="checkbox"/> TRANSMIT PAIR <input type="checkbox"/> REC. PAIR <input type="checkbox"/>				

MCI CIRCUIT NO.	KEYS	COAM <input checked="" type="checkbox"/>	TELCO KEY SYSTEM <input type="checkbox"/>	TELCO PBX <input type="checkbox"/>	DEMARC LOCATIONS:	INTERCONNECT SKETCH NO.
		NO. OF STA. _____				
		APPEARANCES _____ PER CKT.				
MCI CIRCUIT NO.	PBX	TYPE OF PBX _____ ACCESS CODE _____ JACK NOS. _____				
		1. MAN. RING TIE TRK <input type="checkbox"/> 4. 2 WAY DIAL RPTG. TIE TRK <input type="checkbox"/> 5. C.O. PBX TRK <input type="checkbox"/> 6. STA. LINE CKT <input type="checkbox"/>				
		2. AUTO RING TIE TRK <input type="checkbox"/> E & M <input type="checkbox"/> DX <input type="checkbox"/> GROUND STR. <input type="checkbox"/> GROUND STR. <input type="checkbox"/>				
3. OTHER (SEE APPD. INFO) <input type="checkbox"/> 4W (PDSw) <input type="checkbox"/> 2W <input type="checkbox"/> LOOP STR. <input type="checkbox"/> LOOP STR. <input type="checkbox"/>				STATION NO.		
TELCO TO PROVIDE COMMON GROUND <input type="checkbox"/> YES <input type="checkbox"/> NO						

MCI CIRCUIT NO.	ORDERED BY NAME AND ADDRESS	1. <u>4wier loop for DATA</u>	
		10-30-73: <u>Angelo we do not handle</u>	
		<u>orders outside the 5 Boro.</u>	
		RECEIVED APR 1973	
		NOV 1 1973	

PLEASE FORWARD APPLICABLE INSTALLATION AND MONTHLY CHARGES TO CUSTOMER SERVICE MANAGER AT ABOVE MCI ADDRESS.			
INSTALL. CHARGES \$ _____	MONTHLY CHARGES \$ _____	TELCO REPAIRS APPROVAL	DATE
LINE RATES	TELCO CKT. NO.	DATE	DATE

COPY #1 - TELCO
COPY #2 - RETURN TO MCI
COPY #3 - FRANCHISE FILE

MCI APPROVED

MCI

TELCO FACILITY REQUISITION

FD-304 (4-73)

DATE 10/26/73

INQUIRY <input type="checkbox"/>	ORDER <input checked="" type="checkbox"/>	TYPE OF ORDER <input type="checkbox"/>	NEW <input type="checkbox"/>	CHANGE <input type="checkbox"/>	REMOVE <input type="checkbox"/>	HOT CUT <input checked="" type="checkbox"/>	TELCO USE ONLY
PURCHASE ORDER NO. 0065	MCI CIRCUIT NOS. MV1082001	DATE FACILITIES DESIRED Nov 21, 1973	DATE TELCO EQUIP. TERM. DESIRED	OIID, NO.			
RELATIONSHIP ORDERS	STREET 1301 Ave of Americas	CITY N.Y.C.	FLOOR 24	CKT. NO.			
MCI TERM	NAME ANGELO WIDER	STREET CSR	TELE. NO. 582 6520 210	ORIG.			
MCI CONTACT	NAME SCHWIBER ELECTRONICS	STREET JERVICO TURNPIKE	TELE. NO. WESTBORO N.Y.	TEL. NO.			
CUSTOMER NAME & ADDR.	NAME CARL STUDER	STREET	TELE. NO. 516-334 7474	EXT.			

FACILITY REQUIREMENTS SECTION	VOICE GRADE: REGULAR <input checked="" type="checkbox"/> NOMINAL <input type="checkbox"/>	DEMARCO LOCATION: PBX Room	USAGE: <input checked="" type="checkbox"/> VOICE <input type="checkbox"/> DATA <input type="checkbox"/> ALTERNATE
	IF REGULAR, EFFECTIVE: 2W <input type="checkbox"/> 4W (FDX) <input checked="" type="checkbox"/>	GRD. FCR.	
	CONDITIONING: NONE <input checked="" type="checkbox"/> C1 <input type="checkbox"/> C2 <input type="checkbox"/> C4 <input type="checkbox"/>		
1. CHANNEL ACCOMMODATION REQUESTED FROM TELCO: NONE <input checked="" type="checkbox"/> DX <input type="checkbox"/> LOOP <input type="checkbox"/>		USOC CODE	
2. APPLIED TO LOOP AT MCI/TELCO DEMARC: NONE <input checked="" type="checkbox"/> SF <input type="checkbox"/> DX <input type="checkbox"/> LOOP <input type="checkbox"/>			
3. SIGNALING PATH IF DX OR LOOP: 4W SIMPLEX <input type="checkbox"/> TRANSMIT PAIR <input type="checkbox"/> REC. PAIR <input type="checkbox"/>			

FACILITY REQUIREMENTS SECTION	COAM <input type="checkbox"/>	TELCO KEY SYSTEM <input type="checkbox"/>	TELCO PBX <input checked="" type="checkbox"/>	DEMARCO LOCATIONS: PBX Room
	NO. OF STA. APPEARANCES: PER CKT.		STATION APP. LOCATIONS	
	INTERCONNECT SKETCH NO.			
TYPE OF PBX 701/608 SWITCH ACCESS CODE 264				
1. MAN. RING TIE TRK <input checked="" type="checkbox"/> 4. 2 WAY DIAL RPTG. TIE TRK <input type="checkbox"/> 5. C.O. PDX TRK <input type="checkbox"/> 6. STA. LINE CKT <input type="checkbox"/>				
2. AUTO RING TIE TRK <input type="checkbox"/> E & M <input type="checkbox"/> DX <input type="checkbox"/> GROUND STR. <input type="checkbox"/> GROUND STR. <input type="checkbox"/>				
3. OTHER (SEE ADD'L INFO) <input type="checkbox"/> 4W (PDS) <input type="checkbox"/> 2W <input type="checkbox"/> LOOP STR. <input type="checkbox"/> LOOP STR. <input type="checkbox"/>				
TELCO TO PROVIDE COMMON GROUND <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO				

SPECIAL INSTRUCTIONS SECTION	1 - 4W Loop FOR MANUAL TIE TRK TO TERMINATE INTO STA LINE CIRCUIT	
	Replaces FPD 21917	
	10-30-73 Angelo we do not handle orders outside the 5 Boro	
RECEIVED AIP DEPT		

ACKNOWLEDGEMENT SECTION	PLEASE FORWARD APPLICABLE INSTALLATION AND MONTHLY CHARGES TO CUSTOMER SERVICE MANAGER AT ABOVE MCI ADDRESS.			
	INSTALL. CHARGES \$	MONTHLY CHARGES \$	TELCO RPT. NO. APPROVAL	
	LINE MILES	TELCO CKT. NO.	LOOP COMPL. DATE	TELCO INSTN. COMPL. DATE

COPY #1 - TELCO
COPY #2 - RETURN TO MCI
COPY #3 - BRANCH FILE

MCI APPROVED

10/26/73

Examples of customers for which orders have been placed and processed by the telephone company but delays in installation have been caused by the telephone company

Customer name and location:

Reason for delay

- | | |
|--------------------------------|---|
| 1. E. F. Hutton, New York... | Telco will not provide Hot Cut into Centrex; Telco will not provide except with dial access restrictions. |
| 2. F. S. Mosely, New York... | Wrong terminating equipment provided. |
| 3. Standard Brands, New York. | Hot Cut into wrong appearance. |
| 4. Harry Alter, New York... | Delay in notification of pair shortage until due date—took 2 weeks to provide loops. |
| 5. Booz-Allen, New York.... | Wrong interconnect. |
| 6. Gateway, Chicago..... | Loops open. |
| 7. Faulkner Dawkins, Chicago. | Unbalanced loops. |
| 8. Saks Fifth Avenue, Chicago. | No pairs available. |
| 9. Chicago Tribune, Chicago.. | Ckt. termination delay (8 weeks). |
| 10. McGraw Hill, Chicago..... | Do. |
| 11. Sears, Chicago..... | Loops delivered late. |
| 12. Sears, Chicago..... | Unordered restrictions. |

Exhibit 15

MCI TELECOMMUNICATIONS CORP.,

September 25, 1973.

Memorandum for: Bill McGowan.

From: Bert Roberts.

Subject: Bell Associated Companies Refusal to Connect Business Telephone at our Terminal.

The relevant Bell Associated Companies have refused to install customer business telephones at our terminals for connection to our circuits in order to provide interstate service. We must have this type of connection if we are to supply the same type of interstate private line service that AT&T now calls Foreign Exchange (FX).

Please bear in mind the following:

1. This service is provided by AT&T in competition to MCI as a part of Private Line Tariff 260 (Series 2006). This service accounts for a significant portion of the interstate private line market from which MCI would be excluded if we cannot interconnect to customer business telephones located at our terminals.

2. There is, of course, no technical difficulty in providing this service as demonstrated by the thousands of such installations now connected by Bell Associated and Independent Companies to AT&T's Long Lines facilities.

3. Price for this service is not in issue—our customers are willing to pay the published rate for these business telephones.

Although the local Associated Companies have tariffs for this type of business telephone installation and claim that it is a very profitable service, it is apparent that AT&T has decided to prohibit its Associated Companies from providing this service in order to reduce competition to its own interstate private line service.

It is perplexing and extremely harmful to MCI and its customers that we are unable to provide this type of interstate private line service while at the same time AT&T has literally thousands of customers using this exact service.

City: Baltimore.

MCI Branch: Towson.

MCI Rep.: Warren Davis.

Bell Assoc. Co.: C&P of Md.

Bell Rep.: Russ Cooney.

Customer: T. Rowe Price & Ass.

MCI Type Service : C.O. Contrex.

Bell Type Service : Same.

When Ordered : 12-26-73.

When Refused : N/A.

Type of problem (refusal, delay, poor service, etc.) : Improper service.

Problem : 01-29-74, 1200.

Lost was one in-service 2000 has 01-28-74 with one problem. Outbound calls from Balt to Wash are placed on open intercept. This is not correct operation. C&P was to have problem cleared by 0900 01-25-74 or give open an access code to xfer the calls to Wash. This access code is not working. C&P has all hands on. Board at the moment. They can restore orig C&P svc in apx 2 hrs if necessary to satisfy cust. Cust now using DDD for few calls to Wash that are necessary.

W. DAVIS.

MCI TELECOMMUNICATIONS CORP.,
Towson, Md., February 26, 1974.

To : Ted Ittner.

From : Warren Davis.

Subject : T. Rowe Price Associates, Inc.

1. Above customer turned up for service 0930 on 1-30-74 two each circuits (MV1228002 and MV1228003) as ordered by MCI for the customer.

2. Several restrictions were necessary to the Centrex II system due to lack of FX service, etc.

3. After several hours usage, customer in Baltimore started complaining about restrictions, and new numbers. Escalated to Ferguson, and L. Harris for assistance. No way to get unrestricted service.

4. Received customer request via De Rose to go back to C & P facilities, until MCI could provide unrestricted service. Did so at 1655 on 1-30-74.

5. Baltimore completion reports not sent in, as customer cancelled before mailing time on 1-30-74.

Exhibit 16

City : Baltimore.

MCI Branch : Towson.

MCI Rep. : Warren Davis.

Bell Assoc. Co. : C&P of Md.

Bell Rep. : Russ Cooney.

Customer : T. Rowe Price and Assoc.

MCI Type Service : Co Centrex (Two Lines) OPX Stations in Washington.

Bell Type Service : Partially restricted CO Centrex.

When Ordered : See Previous.

Type of problem (refusal, delay, poor service, etc.) : Customer dissatisfaction.

Problem : 1-30-74, 0945.

Mr. Childs at T R Price not happy that C&P would not allow previous station numbers 2349 and 2348 (hunt from 49-48) to remain. In order for C&P to provide this CO Centrex service (without allowing FX service) the partial restriction is required. Instead of the above station NRS C&P gave access codes 1152 (2349) and 1151 (2348) for access to the Wash OPX stations. Any sta in Balt dialing 1152 automatically xfers to the Wash station 2349. Same with 1151 to 2348. Any direct call from Balt in the Centrex goes to intercept if 2349 or 2348 is dialed. The recording says call your attendant for assistance. She can then either xfer the call via 1152 or give calling party the 1152 nr to dial.

Richard DeRose (salesman) informed of situation as well as Jim Ferguson, Nelso Boyd

W. DAVIS.

Exhibit 17

City : Chicago.

MCI Branch : Chicago.

MCI Rep. : Dee Lewis.

Bell Assoc. Co. : Illinois Bell.

Bell Rep. : Dan Kocher.

Customer : Standard Oil.

MCI Type Service : Off Premise Extension.

Bell Type Service : Local Loop & Inter-Connect.

When Ordered : 12/19/73, 2:00 P.M.

When Refused : 12/26/73 11:00 A.M.

Type of problem (refusal, delay, poor service, etc.) : Restriction of in-dial capabilities.

Problem : 1/8/74, 10:30 A.M.—See the attached.

On Thursday, January 3, 1974, I contacted Dick Beal relative to my request for removal of the direct in-dial restrictions on Standard Oil. Mr. Beal advised me no decision had been made at that time. I advised Mr. Beal of the December 31st Court Decision and requested that he reconsider in light of Judge Newcomer's decision. Mr. Beal said he would get back to me after he had a chance to talk to his people. I again contacted Dick Beal on January 8, 1974, to see if the restrictions were removed or were being removed. Mr. Beal advised me IBT was attempting to determine if AT&T had been successful in securing an injunction, and that no action was being taken by IBT until advised by AT&T. He said he had tried to contact, and I believe that name is, Mr. Wylie of AT&T, but was unsuccessful.

Following a discussion of the Standard Oil situation with Mr. Larry Harris, I re-contacted Mr. Beal to advise him we would pursue this situation through legal channels since a resolution did not appear possible. Mr. Beal indicated he would advise his upper management of our intentions.

JOHN ANTANIES.

City : Chicago.

MCI Branch : Chicago.

MCI Rep. : Dee Lewis.

Bell Assoc. Co. : Illinois Bell.

Bell Rep. : Dan Kocher.

Customer : Standard Oil.

MCI Type Service : Off Premise Extension.

Bell Type Service : Local Loop & Inter-Connect.

When Ordered : 12/19/73, 2:00 P.M.

When Refused : 12/26/73, 11:00 A.M.

Type of Problem (refusal, delay, poor service, etc.) : Restriction of in-dial capabilities.

Problem : 12/26/73, 2:00 P.M.—See the attached.

We were advised by Illinois Bell Telephone that they had restricted direct in-dial capabilities on Standard Oil's OPX service, Chicago-St. Louis. The effect of the restriction is to prevent outside callers dialing into the Standard Oil network and ringing the St. Louis customer location.

Bell's placing the restriction at this point in time, they say, is a result of the customer moving into the new Standard Oil Building with Bell analyzing the move order and determining they were providing service that essentially is FX service and therefore needed to be restricted.

I contacted Dan Kocher, Phil Overmyer and Dick Beal of Illinois Bell requesting they reconsider imposing the restriction, since in my opinion the service is not FX service, to no avail. I then attempted to contact Bill Smith, Division Manager, and Dick Smith, Assistant Vice President-Marketing, but both were on vacation. I contacted Larry Harris who advised me that Charlie Jackson of AT&T was also on vacation. When no one at higher than 3rd level at IBT was available to discuss the situation, I again contacted Dick Beal and requested that IBT remove the restriction and give MCI adequate notice that a restriction would be imposed and also give us an opportunity to discuss the situation at a higher management level.

On 12/27/73, I again contacted Dick Beal relative to my request for a delay, and he advised me he hadn't had the opportunity to talk to all the people he needed to, but they could not take the restriction off. He added that IBT was in the process of reviewing all customers installed, and that any customer now receiving non-restricted OPX service would be restricted, however, they would give us notice.

I advised Mr. Beal I felt Bell's action was arbitrary and capricious in restricting existing service without prior notice to MCI or our customer.

JOHN ANTANIES.

Exhibit 18

MCI TELECOMMUNICATIONS CORP.,
September 25, 1973.

Memorandum For : Bill McGowan
From : Bert Roberts.
Subject : Bell Refusal to Provide Service—CCSA.

AT&T offers a private line service called CCSA (Common Control Switching Arrangement). The service basically involves switching centers interconnected by private lines. This service is provided by a combination of the local telco installing and maintaining the switch equipment located in their central office and private line circuits connecting these switches. Approximately twenty of the largest users of private line services presently subscribe to CCSA service from Bell. I understand that AT&T is actively soliciting many other large private line users to turn to CCSA service so, therefore, we can expect the number of CCSA customers to grow. As a percentage of the total private line market, we estimate that CCSA usage could well account for over ten percent of the private line market.

A number of these CCSA customers have asked MCI to provide the private line interstate circuits between the switches as a part of their private line networks. Associated Bell companies have refused to allow this type of connection even though they provide exactly the same connection for independent telcos as well as AT&T Long Lines Department. Attached is the correspondence involving one situation where Illinois Bell refused interconnection involving a CCSA service for Westinghouse.

We need to have a solution to the above problem immediately in that current customer situations are being effected. This is a service that the customer wants and we can provide.

Attachments :

ILLINOIS BELL,
Chicago, Ill., May 1, 1973.

Mr. H. W. GREEN,
Engineering Manager,
Microwave Communications, Inc.,
Chicago, Ill.

DEAR MR. GREEN: This is in response to your letter of April 17, 1973 in which you requested termination of an AT&T CCSA service at Westinghouse's premise at 10 S. Riverside Plaza in Chicago. Connection of this service cannot be accomplished under the terms of our tariffs. We will, of course, provide local distribution facilities as called for under our present contract which will enable you to provide service to your customer.

Would you please confirm your requirements for these local distribution facilities in view of the tariff conflicts. I will withhold issuance of the order until I hear from you.

Sincerely,

DANIEL J. KOCHER,
Staff Supervisor.

MCI MICROWAVE COMMUNICATIONS, INC.,
Chicago, Ill., April 17, 1973.

Mr. D. J. KOCHER,
c/o Illinois Bell Telephone Co.,
Chicago, Ill.

DEAR MR. KOCHER: On June 30, 1972 MCI requested loops and interconnects required to provide three (3) off premise extensions for Westinghouse Electric Corporation into their CCSA at Chicago. At this time we would like to reinstate this order.

Please provide local loop facilities between our equipment area in the John Hancock Building (#9755) and Westinghouse Electric Corp. at the following location: Address: 10 S. Riverside Plaza, Floor 7, Chicago, Illinois.

Attached is the MCI Circuit Request form to furnish you with the additional information you will require. Please note this order is for three (3) circuits.

HAROLD W. GREEN.
Engineering Manager.

Order 11 Order Number (Cont.) 101

Under NEW SERVICE

voice ☐ Out of Service ☐

Ans. Inst. NOT REP.

Auto Facilities

Date Termination in Bell Equipment Wanted

Circuit Number (Inst.) 101

Circuit Number (Bell) 171 011, 0112, 0113

Purchase Number (Bell) INCL ORDER I-1-00087, 00088, 00089

Type of Voice Grade Circuit:

☐ Half Duplex - Tie Cable Number

☒ Full Duplex - Tie Cable Number To SUM 1151, 153, 155

Tie Cable Number From SUM 1152, 154, 156

Type of Signaling

☐ Loop Type of signal provided to Telco at NOT demand

Type of signal expected from Telco at NOT demand

☐ DX Signaling Path: ☐ No demand

☐ No active path

Unit Usage

☐ Data ☐ TTY ☐ Metering ☐ Alternative

☐ FAX ☒ Voice ☐ Multiplex ☐ Other

Terminals 075 N MICHIGAN, Room 9755

From: NOT at

To:

- Name of Customer WESTINGHOUSE ENGR. CORP.

- Address (Alte Room or Floor) 10 S. RIVERSIDE PLAZA FLOOR 7

- Telephone Number 312-431-7200

- Contact Name AL SCHWABERMAN

Termination at St. Louis, Mo.

☒ Bell Equipment

☐ Key System

☒ PEX 701/600 LEVEL 8 & 9PR

☐ Ground Start

☐ Loop Start

☒ 2-way Dial Protecting

☐ COAM

☐ Connector Block

☐ Key System

☐ FAX

☐ Bus. Mach.

☐ Other (GPE)

SA H - Yes ☒ No ☐

Telco Provides Common Ground - Yes ☒ No ☐

Equipment	<input type="checkbox"/> COAX
Key System	<input type="checkbox"/> Connector Block
<input checked="" type="checkbox"/> PBA CCSA	<input type="checkbox"/> Key System
<input type="checkbox"/> Ground Start	<input type="checkbox"/> PABX
<input type="checkbox"/> Loop Start	<input type="checkbox"/> Cbx. Mach.
<input checked="" type="checkbox"/> 2-way Dial Repeating	<input type="checkbox"/> Other
<input checked="" type="checkbox"/> E & M - Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Telco Provides Common Ground - Yes <input type="checkbox"/> No <input type="checkbox"/>	
Special Circuit	
Description of circuit required _____	

Remarks <u>REPLACES 399 82322 - 013, 014, 015</u>	

Exhibit 19

ROCKWELL INTERNATIONAL
El Segundo, Calif., April 24, 1973.

MCI COMMUNICATIONS CORP.,
Bala Cynwyd, Pa.
(Attn: Nelson E. Boyd)

DEAR NELSON: If the interconnect problems associated with CCSA access lines and the Bell System switching locations can be overcome and if your service is expanded to the Columbus and Detroit areas, it is the intention of Rockwell International to allow MCI Communications Corporation to provide the following:

40—4K plus voice channels from Chicago, Illinois to Columbus, Ohio.

Installation—approximately April 1974

36—4K plus voice channels from Troy, Michigan to Columbus, Ohio.

Installation—approximately April 1974

It is our understanding that the maximum charge for the Chicago circuits is \$10,906 and the maximum charge on the Troy circuits is \$7,410 end to end.

Very truly yours,

E. C. SMEDLEY,
Manager, Corporate Telecommunications.

MCI TELECOMMUNICATIONS CORP.,
November 6, 1973.

Memorandum For: Larry Harris, Jim McNabb.
From: Bert Roberts.
Subject: Attached Letter.

Attached is some information that I received from Bob Pickett concerning his recent conversation with Motorola. I believe this letter is pertinent for your Telephone Company files. However, the customer has indicated that he does not want his name used in connection with MCI's interaction with the Telephone Company.

Attachment:

MCI TELECOMMUNICATIONS CORP.,
Chicago, Ill., November 2, 1973.

To: Bert Roberts.
From: R. W. Pickett.
Subject: Motorola.

On November 1, Lee Flaschberger and myself had a meeting with Mr. Rich Witkowski, Manager of the Di Tel Network for Motorola, relative to the order they are placing with MCI for private lines.

Motorola is presently a CCSA network account. They are interested in converting their private lines to MCI as quickly as possible. They have indicated the private line network we can handle at the present time, approximately 100 circuits, would be converted to MCI. The first part of the network we are due to convert will be ten channels between Cleveland and Chicago. We have given an approximate installation date of January 5. Based on the success of this installation, the entire network would be converted by May, 1974.

In relation to our interconnecting to a CCSA network, Mr. Witkowski telephoned Mr. Tom O'Malley, AT&T Account Manager—Motorola, explaining to him their desire to place an order with MCI for their private lines within the CCSA network. He asked Tom directly if AT&T would interconnect to MCI in a CCSA network. Tom delayed answering for several minutes, apparently conversing with his manager in Chicago, and then stated negatively that AT&T's policy at this juncture is not to permit a specialized common carrier to interconnect to a CCSA network. He further indicated AT&T's intent to file a revision to tariff #260, making all interconnection into AT&T more stringent. However, it would open the door more slowly to the possibility of CCSA interconnect.

We requested Mr. Witkowski to give us a letter stating his full intent of converting the network. Though we have an order, he was reluctant to give us a letter that might relate to his intent to fight or oppose AT&T. His feeling was, although Motorola is a major AT&T customer, AT&T is a bigger customer for Motorola; therefore, an open conflict could jeopardize their relationship with AT&T. There is no doubt in my mind that Motorola will convert their network, provided it can be done without a long drawn out battle with AT&T.

If you have any further questions or would be interested in visiting with the customer, please let me know.

Exhibit 20

MCI TELECOMMUNICATIONS CORP.,
February 19, 1974.

Memorandum For: William G. McGowan.

From: James W. McNabb.

Subject: Continuing Critical Problem—Interconnecting with Business Lines.

A pattern has become clear. The Bell Telephone Companies have taken an extremely firm stand on some aspects of interconnection and a variable stand on several others. The situation is as follows:

(1) A local Bell telephone company will not connect business lines to our customer's equipment when that equipment is located *within the premises of an MCI terminal*. Bell states this is a matter of "policy." (Their policy must be that either the premises of a customer cannot exist within an MCI terminal or that interconnection within an MCI terminal constitutes some form of through service.)

(2) In fact, the local Bell companies will not provide business lines and the Long Lines Department will not provide a private line to any customer's equipment so long as it is located at an MCI terminal.

(3) Given that an acceptable customer premise exists (acceptable to Bell), communications must originate and terminate on these premises and the customer must have a regular and continuing requirement for such terminating communications.

(4) Direct electrical connection can only be made through switching equipment

All Bell Companies remain absolutely firm on situation (1), and have begun to stand firm on (2). There have been two exceptions to (2) actually installed

in MCI terminals. First was the Com-Share installation in Chicago. For nearly two years we leased space to Com-Share and had over 50 business lines connected to their equipment (a concentrator) and four Bell provided private lines connected to customer owned high speed modems. However, this system was not moved to the 93rd floor. Late in 1973, Scientific Time Sharing installed equipment in our Detroit terminal. There are presently six business lines connected plus one private line from Bell.

With regard to item (3), it appears that all Bell telephone companies are now insisting that some form of communications must originate and terminate on the premises of the customer. It is only necessary however, that there be one device, capable of initiating or terminating communications, such as a teletypewriter. MCI has not set precedence denying this requirement. For example, in the Trans-Union System a high speed printer is located on customer premises and is connected through the time division multiplexer.

We have a very fluid situation regarding the requirement for switching equipment—item (4). Some Bell telephone companies have recently denied service (refused to connect business lines) because a multiplexer was not considered to be switching equipment. One company (Pennsylvania Bell) recently reversed its decision—perhaps because precedence had been set on the Trans-Union System in St. Louis, Missouri. We are now in the process of trying to get this resolved with all Bell affiliates.

The attached memo relates some of the events for a particular "potential customer"—Dialcom. The memo also indicates that similar problems are "in the works" with another customer—Call-A-Computer.

We are presently attempting to resolve all four situations described above. I expect considerable difficulty with situations (1) and (2). There are several ways to "accommodate" situation (3), and we hope to get the entire Bell System to accept multiplexing equipment as switching equipment.

Situations (1) and (2) are not tariff matters. Bell spokesmen eventually admitted they were *matters of policy*. Situations (3) and (4) are stated in every state tariff. However, these same conditions are found in the F.C.C. No. 260 Tariff which lists Microwave Communications Corporation and N-Triple-C as other participating carriers.

MCI TELECOMMUNICATIONS CORP.,

February 12, 1974.

Memorandum For: Bill McGowan.

From: Jim McNabb.

Subject: Dialcom and the Crisis of Connecting with Local Exchange Service.

On Thursday, January 31st, I was informed by Jim Ferguson of a potential problem with Bell of Pennsylvania. Jim Ferguson in turn had been informed by a Pa. Bell rep (Kent Stevenson), that Pa. Bell could not provide a certain service as MCI was not recognized as a specialized common carrier.

Realizing that this was absurd, I called Larry O'Malley of Pa. Bell. Larry of course agreed that MCI was indeed recognized as a specialized common carrier. He stated that the real problem was a potential violation of their state tariff which was modified late last year to provide for interconnecting with other common carriers. Specifically, Larry O'Malley stated that the mere leasing of a few square feet of space in one of MCI's terminals did not meet their tariff provisions for a customer's premise.

Perhaps a more complete understanding of this situation can be gained by considering the specific wording in Bell of Pennsylvania's tariff. They state that OCC facilities may be connected with local or long distance telecommunications service (provided by the Telco) at the *premises* of the customer provided that, "The local or long distance telecommunications service or Other Common Carrier channel facility is utilized for (1) the origination or termination of communications at the customer's premises where the connection is made and, (2) the customer has a regular and continuing requirement for such terminating communications." Note carefully the two criteria that must be met at a customer's premise: (1) Origination or termination of communications, and (2) a regular and continuing requirement for such terminating communications. Also the definition of the term "premises" in Tariff 260 is, ". . . denotes a building or buildings on continuous property (except railroad right-of-way, etc.) not

separated by a public highway." Leasing space in MCI terminals certainly meets this definition.

Numerous phone calls continued between Jim Ferguson, myself and Larry O'Malley. It was agreed that in order to remove the "issue" of customer premises in this particular case, and therefore expedite service to our customer, MCI would utilize other already existing facilities in Pittsburgh for this particular customer (Dialcom) and we so informed Larry O'Malley. He agreed to expedite the situation.

By Tuesday, it became clear that Larry O'Malley was not making adequate progress even though he flew to Pittsburgh to expedite this situation. I then called Ed Lowry of Bell of Pa., who was already well briefed on the subject. I stated that we needed immediate response or we would be forced to elevate this issue to higher levels in Pennsylvania Bell. Ed Lowry agreed to get back to me with a firm answer before the day was over.

At 10:50 that evening, Ed Lowry called and pointed out that they could not provide the desired service because we would violate two conditions in their tariff. (1) In their judgment, communications did not originate or terminate at the customer's premises, and (2) connections were not going to be made through switching equipment. Specifically, Pennsylvania Bell did not consider a time division multiplexer (TDM) to be switching equipment and they did not consider any administrative type traffic generated at the customer's premises to be a valid type of communications per their tariff requirement.

Next morning I discussed the situation with Charlie Jackson of AT&T. I pointed out first that Pennsylvania Bell was denying service to MCI that was identical with service Southwestern Bell has been providing to MCI for over two years now - specifically Trans-Union. I reminded him that in St. Louis the exchange telecommunication service was connected directly to a time division multiplexer through a group of low speed data sets or modems and that the output of the TDM entered a 4800 BPS modem, traveled over the Bell supplied local loop to our terminal at the Laeledge Gas Bldg., and from there was transmitted over MCI's microwave network to Chicago; where it accessed a computer located in a Trans-Union facility. I explained to Charlie Jackson that this was precisely the situation with Dialcom and that in fact, we had just "gone active" on a similar system in New York. I went on to explain Bell of Pa.'s position re the need for a switch and their belief that communications was not being originated or terminated at the customer's premise. I further informed Charlie Jackson that in a manner similar to that now being utilized by Trans-Union, Dialcom did plan to install a termination device in their facility which would work through the TDM and therefore access the Telco supplied local loop. Therefore, we would meet the test of utilizing the Other Common Carrier facility for origination or termination of communications.

Charlie Jackson stated that if it were not for the fact that apparently a precedence had been set, AT&T would backup Bell of Pa.'s interpretation of their state tariff—namely, that a switch was required, that communications must originate and terminate at the customer's premise and that the leasing of space in an MCI terminal by itself did not constitute a customer's premise. However, he stated that because of these precedents they would take the matter under advisement immediately and attempt to call me back immediately.

I informed Charlie Jackson that in MCI's judgment a TDM was clearly a switch. I then referred him to a letter written by Kelley E. Griffith addressed to Mr. Thomas W. Scandlyn re proper interpretation of certain portions of AT&T's tariff FCC 260 where the provisions in question related to the proposed interconnection of the private microwave facilities of G.E. with the Bell System's private line facilities, offered under that tariff. I read to him the second basic principle of tariff construction as contained in that letter. That second basic principle of tariff construction is as follows:

"Second, the Commission and the courts have held that "tariffs are to be interpreted according to the reasonable construction of their language." 29 FCC 1205; 1213 Your letter construes the tariff term "switching equipment" as including only certain kinds of switches, "such as PBX." Since your tariff does not define "switching equipment" in the way you want to define it, the term must be construed in its ordinary meaning and may not be given the restricted definition you seek to give. Switching is defined by Bell Telephone Laboratories in its "Telecommunications Switching Equipment Directory" as "a device for making, breaking, or changing the connections in a circuit." Standard dictionaries also define a switch as any device used to open, close, or

divert an electric circuit. We have no doubt that GE's proposed "jack field" is "switching equipment" within the ordinary meaning of this term and thus within the meaning of the tariff. By the use of such equipment, it is clear that electrical circuits may be made, broken, changed or diverted."

I stated that a TDM clearly is a device that adheres to the above definitions. Mr. Jackson did not agree. In fact, he informed me that AT&T had made appropriate wording modifications to their tariff such that this issue would be cleared up. I then informed Charlie Jackson I had just spoken with Kelley Griffith and he stated that this entire issue, namely, his letter of 3/29/73 had become a ruling and that in his judgment this ruling was now in effect. Charlie Jackson took issue with this point and said AT&T *did not* accept this as a ruling. So much for the usual agreement between AT&T and the FCC.

I talked again with Ed Lowry of Bell of Pa. I informed him of my conversation with Charlie Jackson and I informed him in some detail of the precedent setting situation, with Trans-Union. He appeared surprised and stated he would immediately deliver this "new information" to those (at Bell of Pa.) who were interpreting their tariff and that he would call me back before the end of the day.

During the conversation, I advised both Messrs. Jackson and Lowry that MCI was extremely upset over Bell of Pa.'s actions and that they were jeopardizing our ability to provide service to our customers. In fact, I stated it was possible our customer would cancel the order¹ and that if this happened, MCI would hold Bell fully responsible for this loss and would take all actions necessary to obtain justice.

BROAD IMPLICATIONS

This situation has broad implications for MCI. I was recently informed by Ralph Johnson that we have perhaps an even more serious situation with a customer—Call-A-Computer. I found out that Ralph Johnson had initially brought this to our attention in December via the problem report required by Larry Harris. Details are contained on that report, but in essence, the situation is quite similar to the Dialcom case in that C&P Telco is refusing to provide interconnection between their Telco exchange lines in Baltimore and customer owned equipment installed in the MCI terminal in space leased to Call-A-Computer by MCI. What makes this situation even worse is that twelve Telco exchange lines have already been installed (without DAAs), the multiplexer and modems have been installed by the customer, and we have leased them space in the MCI terminal. Everything is set to go in Baltimore. In Washington (the other end), the loop is in and fully checked out from our terminal to the customer's premises in McLean. Again, everything is set to go.

We are trying to get at the heart of this Call-A-Computer problem and this will be more fully described in a separate report. I have also asked Harold Green's people to quickly compile all situations both installed and about to be installed, where the issue of interconnecting with local company exchange facilities comes up.

THE GENERAL PROBLEM

The nature of the problem is clear. Each local Telco has modified its existing state tariff giving the terms and conditions that must be met before they will provide interconnection with a specialized common carrier facility; they usually refer to us (the SCC's) as an Other Common Carrier or OCC. While it is true that OCC tariffs were developed, these tariffs replaced our contracts for facilities and do not deal with the subject of interconnection. The subject of interconnection, therefore, is solely dealt with in the modified state tariffs. In fact, the OCC tariffs all contain a paragraph stating in effect that interconnection with the Telcos' services can only be done in accordance with the terms and conditions of the telephone companies' tariffs applicable to such connections, e.g., *their state tariffs*.

All state tariffs contain similar wording with regard to interconnection. I am preparing a separate memo analyzing the ramifications of this wording.² I will

¹ The customer did cancel in Pittsburgh. MCI is also in jeopardy with this customer in Philadelphia and New York.

² It turns out there are many "surprises" for example consider the section entitled "Responsibility of the Customer" in Bell of Pa.'s tariff. It states, "The customer shall inform the Telephone Company of the termination arrangements at the distant end of the Other Common Carrier's channel facilities and of the proposed use of the overall interconnected facilities."

not discuss other areas at this time, rather I will concentrate on only those areas impacting us right now. Namely, (1) that there must be origination or termination of communications at customer premises, (2) that there must be a regular and continuing requirement for such terminating communications, and (3) such connections shall be made through switching equipment.

WHAT CHOICES DO WE HAVE IN FIGHTING THIS ISSUE?

(1) We can argue each point and for example, *convince Bell* that TDM's are really switching equipment.

(2) We can get the tariffs modified such that these conditions are not required.

(3) We can use our court decision and force Bell to treat MCI like the Long Lines Department.

Utilization of the court decision has to be the quickest route. We will certainly all be much older by the time we get Bell to change their interpretation of their definitions of a switch, customer premises, etc. We will be even older by the time we get Bell to actually change their tariffs. Therefore, the quickest avenue should be through the interpretation of the court ruling.

However, we must rapidly document those situations where the Long Lines Department interconnects in the manner in which we wish to interconnect. For example, Dialcom has just cancelled their order with MCI and plans to put in the system utilizing Long Lines instead of MCI. If this actually happens we will no doubt find that the Long Lines Department will provide the identical facility to that which MCI would have provided. Most significantly the local Telco will provide to this customer the exact facilities that they would not provide because of the so called tariff violations by MCI.

Exhibit 21

MCI TELECOMMUNICATIONS CORP.,

February 22, 1974.

Memorandum For: Larry Harris.

From: Jim McNabb.

Subject: Status of: Scientific Time Sharing, Dialcom, Call-A-Computer.

Larry, after numerous discussions, phone calls and a brief review of our files, I believe the status of these three customers is as follows:

Scientific Time Sharing

Scientific Time Sharing has equipment installed in our facilities in Detroit. They have six business lines connected to a time division multiplexer (TDM) and they have one interstate leased line from Long Lines Department. They signed a lease agreement with MCI effective August 30, 1973.

Scientific Time Sharing did not sign an agency agreement with MCI. They have ordered business lines directly from New York Tel and New Jersey Tel to be connected to equipment located in space leased from MCI - in our terminals. New York turned us down verbally several days ago. Rich DeRose does not know about New Jersey Tel (whether they have turned us down or not) and hesitates to inquire until you and he visit Scientific Time Sharing on Tuesday, February 26th.

Scientific Time Sharing has a copy of our license agreement. According to Rich DeRose they were planning to sign it, but are now holding back because they presently have reservations about going ahead with MCI due to the "uncertainties" between MCI and the Bell System as to whether or not interconnection can be made in space leased from MCI.

Scientific Time Sharing has their own facilities in Washington and Dallas. They now have one 4K Plus circuit installed and operating between Washington and Dallas.

Dialcom

The Dialcom situation has been documented quite thoroughly for Pittsburgh in my earlier memo. In brief, we decided to use an already existing Dialcom facility in Pittsburgh in order to avoid the basic stumbling block of space for equipment being leased in MCI terminals. Pennsylvania Bell eventually agreed to provide business lines to Dialcom's multiplexer. By that time, however, the

Dialcom customer had become quite nervous and decided to go with the Bell System for its leased line service.

As we have an agency agreement with Dialcom, MCI placed orders for Bell business lines in Philadelphia and New York. On February 11, 1974, Larry O'Malley officially told Ed Braunston that Bell of Pennsylvania would not provide business lines in Philadelphia for two reasons. 1) That equipment residing in an MCI terminal could not be considered customer premises and, 2) that there had to be switching equipment involved—obviously meaning that a TDM was not switching equipment.

It is my understanding (at this moment) that New York Tel has also turned down our request for business lines. Rich DeRose is attempting to determine the details of this rejection today.

In all cases we have signed license agreements from Dialcom. However, MCI has not yet consummated them.

Earlier Dialcom placed an order for a circuit from Washington to Baltimore. However, I have been told that MCI decided to reject this order because it was not profitable. I have not looked into the details of this particular situation.

In all cases circuits were to be between Washington and the cities of Pittsburgh, New York, Philadelphia and Baltimore.

Flash

I just had discussions with Ed Lowry concerning the placement of orders for loops going outside the local distribution area. He volunteered to have a "high level" representative from Bell of Pennsylvania go along with MCI to visit Dialcom and to explain that they would provide all required business lines in Pittsburgh and assure Dialcom that there would be no "harassment" or delays because MCI was involved. He *did not* however, make the same offer for the proposed Dialcom installation in Philadelphia. In fact, he said they *would not* provide business lines because the premise did not meet some of the basic tests, namely (1) there would be no communications originating or terminating there, and (2) there would be no switching equipment (on this point I think he is confused). Interestingly he did say that Bell of Pennsylvania *did not object to MCI being the landlord*. This is the first time I have ever heard anybody in the Bell System make that statement! Certainly Charlie Jackson does not agree with him.

Call-A-Computer

Call-A-Computer placed an order with MCI on October 17, 1973 for one 4K Plus voice line from Baltimore to Washington. The Washington end was to be located in already existing Call-A-Computer facilities in McLean. The Baltimore space was to be leased from MCI at the Baltimore terminal site.

About the end of 1973, Call-A-Computer's equipment (multiplexer and modem) had been installed in the Baltimore site. Call-A-Computer did not sign an Agency Agreement with MCI and therefore requested the appropriate private lines directly from Bell. In this particular case a New England Tel account rep named Jack Forrest was handling all Call-A-Computer requests. New England Tel actually placed orders with C&P for the business lines in Baltimore.

In Washington the only request made by MCI of C&P was for a local loop from the Washington terminal to Call-A-Computer's premises in McLean, Virginia. This local loop was put in without difficulty and has been checked out successfully from McLean clear through to Baltimore.

On February 8th, a letter was sent from New England Tel to Call-A-Computer. Late in the afternoon of February 21st., Ralph Johnson called in the text of this letter and I have it attached to this memo. I have also attached a possible draft letter to the president of New England Tel that you might send after you and John Worthington review it. I have also attached a copy of the December 21st memo from Ralph Johnson to you indicating that we began to get into trouble as far back as December of 1973.

I believe the information contained in this brief report is accurate. According to Bill McGowan's *suggestion* that we send letters to telephone companies when we *think* that they might deny us service, you might also want to send letters (similar to the one attached) to New York and New Jersey Telcos re Scientific Time Sharing, and Philadelphia and New York re Dialcom.

There must be a *better way* of obtaining facts than by going through a Sherlock Holmes type of investigation similar to the one I have just gone through today. Let's discuss!

Attachments:

Draft Letter

WILLIAM C. MERCER,
President,
New England Telephone Co.
Boston, Mass.

DEAR MR. MERCER: MCI has recently determined that New England Telephone Company has informed our customer, Call-A-Computer, that Bell System services will not be provided in Baltimore. Specifically, you state in your February 8 letter to Call-a-Computer that, "We (New England Tel) could not however, provide service for Call-A-Computer at a location which is a premise of an Other Common Carrier." You go on to state that, "...we (New England Tel) do not connect Bell System services with facilities of Other Common Carriers on the basis that this configuration would constitute a joint through service."

Your statement that you cannot provide services at a location which is a premise of an Other Common Carrier is absolutely not applicable to this situation. Our customer Call-A-Computer, has every right to lease space wherever he desires. The fact that Call-A-Computer has in this instance leased space from MCI has absolutely no bearing on your contention that it's a premise of an Other Common Carrier. It is solely a business judgment on the part of any customer as to where and under what conditions he chooses to lease space. Therefore your attempt to relate Call-A-Computer's leased facility with MCI's activities as a Specialized Common Carrier is a clear case of harassment and cannot be tolerated.

Your further claim that this configuration would constitute a joint through service is completely without merit. I must bring to your attention that Call-A-Computer presently leases space from several organizations throughout the United States where its modems and multiplexers operate in an unattended fashion. In every case the local Bell company has provided business lines and the Long Lines Department has provided interstate private lines. All time sharing organizations operate in this manner. They lease space wherever possible, install and operate their equipment and the Bell System provides business lines and interstate lines without question. The Bell System has absolutely no right to question from whom the space is leased—this has absolutely nothing to do with the provisioning of their service.

This discrimination and treatment of MCI and its customers must cease immediately. The financial losses that MCI is suffering due to this type of discrimination are substantial. The practice of favoring AT&T Long Lines over MCI is, on its face, anti-competitive.

LARRY HARRIS.
MCI TELECOMMUNICATIONS CORP.,
December 21, 1973.

Memorandum For: Larry Harris.
From: Ralph Johnson.
Subject: *Call-A-Computer*.

Attached is the report I faxed to you on 12/14/73 in reference to Bell refusal to interconnect local dial central lines to the customer modem and multiplexer equipment for eventual connection to an MCI line. Since the report the following information has been obtained.

1. C & P Telephone has already installed the dial lines into the MCI terminal in Baltimore. AT&T has directed them to not make the connection to customer equipment. AT&T policy was now known by the customer; New England Telephone (they represent Bell to the customer at their Boston headquarters), or C & P Tel. Co. of Md. until Wednesday, December 12, 1973. Customers equipment has been delivered to our Baltimore terminal.

2. Prior to Wednesday the 12th, the customer had repeatedly been assured by Bell that all was well. MCI had scheduled very early January as the turn up date. In attempting to obtain an AT&T line so that he can go into service, the customer has been notified that there is a *shortage of facilities* on the Baltimore-Washington route and cannot get service before February.

3. MCI has installed customers with this type of "through service."

4. By copy of this memo I am asking the Washington Branch to obtain written denial from C & P of Md.

5. One of Call-A-Computer's major time sharing customers is C & P Telephone. Please pursue vigorously but with discretion.

If you need more information please let me know. Bert Roberts indicated he can supply you with additional information you might require. I am looking forward to an early solution.

Letter from New England Telephone Company

FEBRUARY 8, 1974.

To : Call-A-Computer

DEAR LEE: Regarding our telephone conversation today, please be advised of the following :

(1) We will provide Bell System services, i.e., local exchange and private line facilities when connected at a premise of Call-A-Computer.

(2) We could not however, provide service for Call-A-Computer at a location which is a premise of an Other Common Carrier.

(3) Once again as outlined in my letter of December 27, 1973, "we do not connect Bell System services with facilities of Other Common Carriers on the basis that this configuration would constitute a joint through service."

As I get information I will be in touch

JACK FORREST,
Account Representative.

Exhibit 22

MCI TELECOMMUNICATIONS CORP.,
November 7, 1973.

Memorandum For : Bert Roberts.
From : Anthony Penna—Bill Bower.
Subject : KORVETTES.

The customer is Korvettes ; The Communications Manager is Charles Carroll :
The AT&T Rep is Ray Ellison :

Problem: Korvettes has suburban stores in Chicago that are coming into a switch in North Riverside (which is in Chicago) that is now being serviced by AT&T on an interstate basis. The loops bringing in the suburban stores are now considered interstate loops. Charles Carroll was told by AT&T that if MCI takes over this switch those loops will be considered intrastate. He has 28 circuits coming into the switcher from the suburban stores and only 15 on an interstate basis go out of the switcher. As per Larry Harris' request, Mr. Carroll has asked for a letter from AT&T stating their position. The request was made 4 weeks ago and we haven't heard from them as yet. They are quite obviously stalling. Our being able to serve these loops on an interstate basis is most important to the sale.

AT&T LONG LINES,
New York, N.Y., December 21, 1973.

Mr. CHARLES P. CARROLL,
Corporate Communications Manager,
Korvettes, New York, N.Y.

DEAR CHARLES: This refers to your letter of October 5, 1973, regarding policy questions related to jurisdiction of private line service when connected to interstate facilities provided by other Common Carriers.

It is our understanding that MCI would provide the interstate facilities between Bell System provided PBX's located on the customer's premises in North Riverside, Illinois; Redford, Michigan; Baltimore, Maryland; New York, New York; Newark, New Jersey and Audubon, New Jersey. Also, that Bell will provide services from the switching locations to stores located in the same or adjacent states and that these services will be connected only to the interstate channels provided by MCI.

Based on the above, the response to your inquiry is as follows:

1. When the terminals of a Bell provided service are in the same state, the service will be provided by the Associated Company at its intrastate rates. When the terminals of a Bell provided service are in different states, the service will be provided either by Long Lines or, in the case of privileged business, by the Associated Company, at interstate rates.

2. Long Lines does not supply switching equipment or arrangements to other carriers. Whether or not the Associated Company leasing the local distribution facilities to the other carrier would provide 29A or similar type switching would depend upon the lease arrangement between it and the other carrier.

3. The provision of 29A or similar type switching by an Associated Company on an intrastate service would be governed by the intrastate tariff of that company.

4. Each Associated Company will be responsible for each intrastate or interstate service it provides. Where all interstate service is Long Lines business, Long Lines will be responsible for that service.

Also, in reference to the status of Korvettes' 83B Teletypewriter Switching System and its connection with service of Other Participating Carriers, the Tariff F.C.C. No. 260 does not contemplate connection of channel types below voice grade.

We would like to emphasize once again that when Bell provided service is interconnected with an Other Carrier-provided service, Bell does not assume responsibility for end-to-end transmission.

Should you have any additional questions or would like to discuss this matter further, please call me, 334-3086.

Yours truly,

R. F. ELSON,
Account Manager.

City: Chicago, Illinois.

MCI Branch: New York (JCP NY).

MCI Rep.: Anthony Penna.

Bell Assoc. Co.: AT&T Long Lines.

Bell Rep.: Ray Elson.

Customer: Korvettes.

MCI Type Service: 4K Plus Voice.

Type of Problem (refusal, delay, poor service, etc.): Favored treatment of AT&T Long Lines.

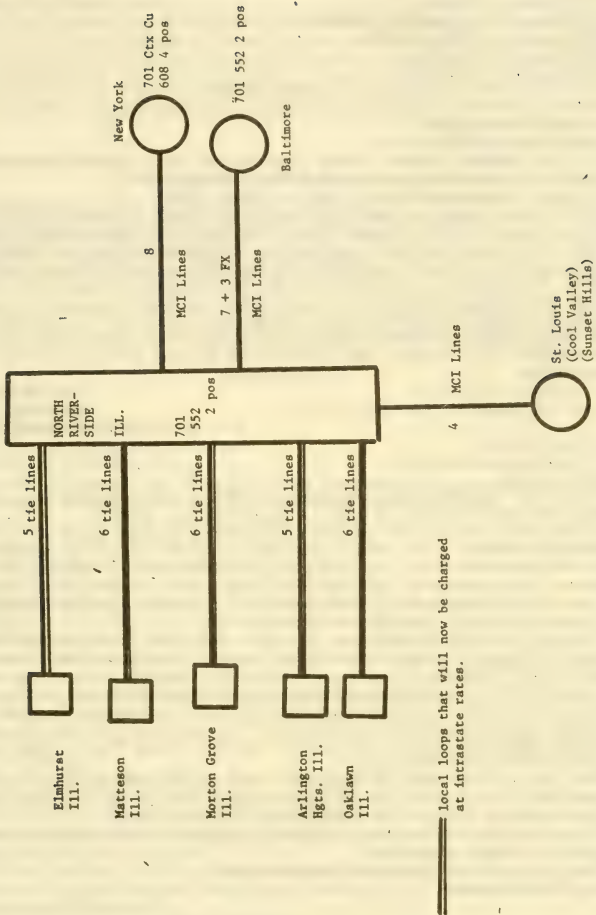
Problem: December 21, 1973.

Korvettes was told by Ray Elson, Account Manager, that the local loops from a Korvettes switch (701) located in Chicago to Korvettes suburban stores, will be charged intrastate rates if the long haul (interstate) portion of the switch is taken over by MCI. If AT&T is servicing the interstate portion of the switch the local loops remain at interstate rates.

Charles Carroll, Corporate Communications Manager for Korvette, at our request asked Mr. Elson to put AT&T's stand in writing. The request was made on October 5, 1973 and a reply was received by Mr. Carroll on December 23, 1973.

Mr. Carroll had refused to give us an order until he had received the letter from AT&T. Had the letter been received sooner, we could have processed the orders and installation would have begun on January 2, 1974. Because of the delay, we won't be able to begin installation until Mid-February. We have lost approximately 1.5 months of revenue, approximately \$30,000.00.

ANTHONY PENNA.



City: Chicago.

MCI Branch: Chicago.

MCI Rep.: G. S. Brodey/J. Brilliant.

Bell Assoc. Co.: Illinois Bell.

Bell Rep.: Wm. Smith.

Customer: E. J. Korvette.

MCI Type Service: Tandem tie trunks and OPX.

Bell Type Service: Service from Centrex to Chicago stores.

When Ordered: N/A.

When Refused: N/A.

Type of problem (refusal, delay, poor service, etc.): AT&T notification to Korvette of charges change from inter-state to intra-state.

Problem: See attached letter to Korvette from AT&T.

G. S. Brodey spoke to Wm. Smith on 1/15/74, and I spoke to Wm. Smith again on 1/16/74, to verify some points. Bill indicated that he was knowledgeable of the factors relating to the Korvette configuration and rate change, and he has received no word from AT&T relative to the impact of the Pa. court case results. I asked him to assume that it was determined that AT&T would accept the findings of the court, what action would be necessary to affect a change in billing position from that referenced in the AT&T letter to Korvette. Bill assumed that a revised tariff filing would have to be accomplished by IBT. No definition as to whether this tariff would be filed with the FCC or State Commission.

J. B. BRILLIANT.

KORVETTES,

New York, N.Y., February 5, 1974.

Mr. ERIC COLLETT,

MCI Communications Corp.,

New York, N.Y.

DEAR RIC: On Wednesday, January 16, 1974, I met with Bill Bower, Tony Penna and you to review my letter to you of January 14, 1974.

We discussed whether the circuits from outlying Chicago stores to the North Riverside switcher would remain interstate or would become intrastate when the ATT interstate tie lines to New York and Baltimore are replaced with MCI circuits. I was assured by you that these local circuits would remain interstate in view of the recent order 73-2499 issued in U.S. District Court in Philadelphia by Judge Clarence C. Newcomer on January 3, 1974.

However, the Bell System does not agree with your interpretation. Attachment A is a copy of a letter from George Marinier, Communications Consultant, Illinois Bell Telephone Company. His letter lists monthly mileage charges for tie lines to the outlying Chicago stores from the North Riverside switcher. The lines would be billed at intrastate rates. Attachment B is a copy of a letter from Leonard A. Teasdale, Sales Supervisor, A.T.T. Long Lines. It lists the present monthly mileage charges for tie lines at interstate rates. The terminal charges would be the same in both cases.

The change from inter to intrastate rates would cost Korvettes an additional \$632.75 per month. That is approximately 25% of the projected savings for converting to MCI for this segment of our line network.

Please give this matter your immediate attention. I want to see this question resolved as quickly as possible.

Your cooperation in this matter is appreciated.

Sincerely yours,

CHARLES P. CARROLL,

Director of Corporate Communications.

Attachment A

ILLINOIS BELL,

Hinsdale, Ill., January 23, 1974.

Mr. CHARLES CARROL,

Director of Corporate Communications,

New York, N.Y.

MR. CARROL: This letter will confirm our telephone conversation on Friday, January 18 where we discussed the Illinois Bell charges for the tie lines

between your Chicagoland stores. I have attached the monthly charges associated with these tie lines.

I will be in contact with Ray Elson of A.T.&T Long Lines this week to begin the necessary coordination of removing the A.T.&T circuits between North Riverside, Illinois and New York and Baltimore. Your Long Lines contact will be responsible for verifying due dates. If you should have any additional questions, I may be reached on 312-986-9973.

Sincerely,

GEORGE MARINIER,
Communications Consultant.

Korvette's monthly mileage charges per tie line

1. Matteson, Ill., 4200 Lincoln Highway, 747-3300	\$104. 75
2. Morton Grove, Dempster St. and Waukegan Rd., 679-4040	63. 50
3. Elmhurst, 575 West St., 833-6900	44. 75
4. Oak Lawn, 8700 South Cicero Ave., 636-5110	44. 75
5. Arlington Heights, 10 West Rand Rd., 394-4070	86. 00

These charges are based on North Riverside being the central point. These above charges do not include any charge which may be applicable due to the North Riverside PBX, such as incoming selectors or other tie line features.

Attachment B

AT&T LONG LINES,
New York, N.Y., January 21, 1974.

Mr. CHARLES P. CARROLL,
Corporate Communications Manager,
Korvettes, New York, N.Y.

DEAR MR. CARROLL: The following is the information you requested from Mr. Kutcher concerning the billing of your existing Illinois services.

Locations	IXC	STA	Total (each)
Oaklawn	\$27	\$40	\$67
Elmhurst	27	40	67
Matteson	75	40	115
Morton Grove	42	40	82
Arlington Heights	60	40	100

If you have any questions, please call us on 212-334-3088.

Respectfully yours,

LEONARD A. TEASDALE,
Sales Supervisor.

City: Cleveland.

MCI Branch: Cleveland.

MCI Rep.: R. C. Furnival.

Bell Assoc. Co.: Ohio.

Bell Rep.: Charles T. MacKay.

Customer: Harris-Intertype.

MCI Type Service: 1 line to Chicago—2 lines to Newark.

Type of Problem (refusal, delay, poor service, etc.): Pricing of customer's service.

Problem: 1/30/74, 10:30.

Harris-Intertype presently has service from Cleveland, Ohio to Dayton, Ohio that they are receiving interstate rates for, as part of total interstate network. Mr. MacKay told Pete Howley that these would be changed to intrastate rates if the customer were to switch to MCI circuits on the part of their system that in interstate.

R. C. FURNIVAL.

Exhibit 23

MCI Branch: Cleveland.

Bell Assoc. Co.: Ohio Bell Telco

Customer: Telemart Consultants (Harris Intertype).

MCI Type Service: Interstate ckts. tandemed to Intrastate ckts.

Bell Type Service: Intersate ckts. tandemed to Intrastate ckts.

When Refused: 1/23/74.

Type of problem (refusal, delay, poor service, etc.): Charges.

This situation is similar to Korvettes in Chicago. Telemart has a customer with circuits from Dayton to Cleveland, Ohio and from Cleveland to Newark. At Cleveland the circuits have dial-tandem capability; therefore, they are now billed under interstate rates.

If MCI replaces the Cleveland-Newark ckts. from AT&T, then the Dayton-Cleveland ckts. will revert to *intrastate* rates as provided in OBT tariffs. This was stated by C. Mackay in response to my question. He said he talked to "195" on this before calling me back. Telemart's customer is Harris Intertype. They have two (2) ckts. Cleveland-Newark and one (1) Cleveland-Chicago, which Telemart would like MCI to serve.

In effect, OBT is stating that if a customer does business with AT&T, they will pay one rate within the state of Ohio and if they do business with MCI for an identical service, they will pay a different and higher rate.

PETER H. HOWLEY.

Exhibit 24

MCI TELECOMMUNICATIONS CORP.,

February 21, 1974.

Memorandum For: Larry Harris.

From: Carl Vorder Bruegge.

Subject: St. Regis Paper.

Arthur Katz of Computoll, Inc., advised me yesterday that his customer and our prospect, St. Regis Paper, has been told by AT&T and New York Telephone that the rates they will pay for circuits in New York State will go to an intrastate rate if they give MCI the intrastate business off the PBX. They have refused to give them this in writing.

Exhibit 25

MCI TELECOMMUNICATIONS CORP.,

Washington, D.C., March 29, 1974.

Mr. VINCENT J. MULLINS,

*Secretary, Federal Communications Commission,
Washington, D.C.*

DEAR MR. MULLINS: In accordance with Section 1.716 of the FCC Rules, MCI hereby forwards this informal complaint under Section 208 of the Communications Act against American Telephone and Telegraph and Illinois Bell Telephone Company.

Korvettes presently purchases services from Chicago to points such as New York City, Baltimore and St. Louis from AT&T under Tariff FCC No. 260. The long haul portion of these circuits terminate in a PBX on Korvettes premises in Chicago and from that point, by utilizing short haul facilities, go to various Korvettes locations in and around Chicago. The total services are purchased under Tariff 260 and both the long haul and short haul facilities are priced to Korvettes under interstate rates by the Bell System.

Korvettes has placed orders with MCI for circuits between Chicago and New York City, Baltimore and St. Louis. On December 21, 1973, see attached letter, AT&T Long Lines informed Korvettes that if Korvettes purchased long haul facilities between Chicago and New York, Baltimore and St. Louis from MCI rather than AT&T Long Lines, the short haul portion of that service in the Chicago area will be billed to Korvettes at intrastate rather than interstate rates.

On March 20, 1974, AT&T reconfirmed that it was that carrier's policy that, if Korvettes uses MCI's interstate long haul facilities between Chicago and Baltimore, New York and St. Louis, Illinois Bell Telephone will charge Korvettes intrastate rates for the short haul facilities.

Attached is a diagram showing both the long haul interstate facilities and the short haul facilities for the Korvettes requirements. The local facilities which Korvettes would utilize would be identical should MCI or AT&T Long Lines provide the long haul portion of Korvettes services.

If Korvettes is forced to purchase the short haul facilities from Illinois Bell Telephone under intrastate rates in order to accommodate Korvettes purchase of long haul facilities from MCI, Korvettes cost will be substantially increased thereby precluding Korvettes from purchasing service from MCI.

It is Bell's position that, even though a service is used for interstate purposes, Bell will determine when the end link of that service will be billed at intra or interstate rates. In essence, if Long Lines is providing the long haul interstate facilities, the end link will be billed at interstate rates. The Bell Associated Companies are using their control of monopoly facilities to give AT&T Long Lines department a competitive advantage over MCI.

MCI has already lost several customers because of this Bell policy and is in imminent danger of losing many more customers. This Bell policy effectively denies communications users such as Korvettes the right to choose the long haul carrier most efficient and financially acceptable to them.

Since MCI is presently losing substantial revenues and is in danger of losing many customers because of this Bell practice, we would appreciate expedited action on the part of the Commission in this matter.

Very truly yours,

LAURENCE E. HARRIS,
Vice President.

Exhibit 26

City : NYC.

MCI Branch : N.Y.

MCI Rep. : R. J. Doelger.

Bell Assoc. Co. : N.Y. Tel.

Bell Rep. : Mike Dillilo, 212-394-6418.

Customer : Metromedia.

MCI Type Service : 4K Plus Voice (4).

Bell Type Service : 2001—Tandem Tie Lines (4).

When Ordered : November 2, 1973.

When Refused : NA.

Type of problem (refusal, delay, poor service, etc.) : Additional Charges.

NY Tel States that they will provide a room circuit to connect our equipment to their frame. They will charge the customer \$2.30/mo. and assess a one-time installation charge of \$50.00. It is my understanding that they do not charge AT&T for this service.

D. E. KISTLER.

Exhibit 27

MCI TELECOMMUNICATIONS CORP.,
Chicago, Ill., March 12, 1974.

To : Larry Harris.

From : John Antanies.

Subject : Possible Illegal AT&T Practice.

Today during a sales call at Regensteiner Publishing Enterprises, 1224 W. Van Buren Street, Chicago, Illinois, Mr. Eric Kert, Corporate Treasurer, advised William Carmody and I that one of the reasons he would probably not replace his existing AT&T full period between Chicago and New York with an MCI service is that when his service fails, he upon advice of his IBT marketing representative uses the DDD network and the Bell system franks the charges. Mr. Kert said his line was down a week or so ago for 2 hours, and that he used the DDD network for his calls and that the toll charges would be picked up by the telephone company.

It sounds to me like the public network is being made available to private line customers at no charge.

MAY 30, 1973.

To: Laurence Harris.

Reference the attached memo to John Montgomery.

The Bell companies do provide a traffic measurement arrangement for some of their customers, but probably no more than on an annual basis. A CCSA customer would probably get a measurement of this type on a semi-annual basis if requested. Although this problem does have marketing implications, it is not quite as serious as Ralph Johnson seems to suggest. I don't imagine that we would be in the position to offer such measurements at the beginning of our service, but this kind of traffic study could be arranged in the future. I don't think we should get "exercised" at the comments in this memo.

ESB.

MAY 17, 1973.

John Montgomery.

Ralph Johnson.

Bell Traffic Measurement devices on Private Lines.

We have come across a situation in a number of accounts that needs clarification. The Operating Companies provide a traffic measurement service free of charge. The traffic measurement varies from a simple measurement of line utilization to a complete monthly traffic analysis including holding time, number of busies, p-factors, etc.

The question is:

1. Will this service be continued by Bell for MCI lines when an MCI line replaces an AT&T line?

2. Will MCI provide an equivalent service (also free of charge) if the Bell Company chooses to discontinue the service?

It would appear that this issue should be reviewed in marketing for its potential implications. Further, Larry Harris should be consulted to determine if an agreement to maintain such services can be obtained from Bell, or if they *must* maintain them. Finally, an MCI position should be developed so that this situation can be addressed firmly in each account.

Some letters of intent are being held up and some letters of intent may not be "exercised" at installation time if this situation is not clarified.

Thank you for your cooperation.

Exhibit 28

MCI TELECOMMUNICATIONS CORP..

Chicago, Ill., February 22, 1974.

To: Larry Harris.

From: John Antanies.

Subject: Attached IBT Memo Dated 1/28/74.

Attached is IBT's reply to my request asking that seven MCI circuits for Gateway Transportation be diversified to avoid the impact of a carrier failure.

Attachments:

ILLINOIS BELL,

Chicago, Ill., January 28, 1974.

Mr. JOHN ANTANIES,

MCI Telecommunications,

Chicago, Ill.

DEAR MR. ANTANIES: In reference to your letter of December 27, 1973, it is my understanding that the procedure you quoted is a Long Lines practice. That practice applies to the routing of facilities between Long Lines toll offices. The ability to provide that form of diversity to your patrons rests solely within your company. That practice is not followed by Illinois Bell.

If facilities are available whenever two or more circuits are ordered to the same place at the same time, Illinois Bell will attempt to assign different carrier systems. However, carrier systems are normally filled one at a time and a second system is not usually turned up until the first is almost full. No attempt is made to maintain this diversity in event of a plant rearrangement.

If you desire, we will provide to you, at the appropriate rates, facilities diversified under the special routing provision of the O.C. tariff. Please advise me if you wish to pursue this option.

Sincerely,

DANIEL KOCHER.

MCI TELECOMMUNICATIONS CORP.,
Chicago, Ill., December 27, 1973.

Mr. DANIEL KOCHER,
Illinois Bell Telephone Co.,
Chicago, Ill.

DEAR DAN: On Friday, December 7, 1973, seven Gateway Transportation circuits serviced from the MCI Chicago Terminal were interrupted from approximately 1:40 P.M. to 5:05 P.M. CST. The failure was caused by a defective converter panel at Illinois Bell's Superior Exchange. We were told that all of our service was down because all seven circuits route on this T-1 carrier system.

It is my understanding that a minimum of 25% of long line circuits for a given customer to a given premise be diversified automatically at no charge to the customer. I request that MCI's customer be provided this same kind of diversification. I would appreciate your attention to this matter so I can advise our customer of the steps we are taking to protect his communications.

Sincerely,

JOHN ANTANIES,
District Operations Manager.

Exhibit 29

City: Washington.
MCI Branch: Washtn.
MCI Rep.: Andy Fulton.
Bell Assoc. Co.: C & P of Wash.
Bell Rep.: J. Everett.
Customer: T. Rowe Price Ass.
MCI Type Service: OPX (2).
Bell Type Service: Key Equipment.
When Refused: N/A.
Problem: 1/30/74, 11:00 A.M.

MCI Rep. (S. Stepler) arrived at customer's wire closet to perform final tests prior to turning up circuits. He found an anonymous note written on the cover of our wescom package which stated, "This does not belong here. Please remove."

I called J. Everett (C & P) regarding this. He called the local foreman for an explanation. The foreman said he had not done it, and he would instruct his people that MCI's equipment has every right to remain in any wire closet.

ANDY FULTON.

Exhibit 30

MCI TELECOMMUNICATIONS CORP.,
October 23, 1973.

Memorandum For: Fred Sharp.
From: Boyd Wanzer.
Subject: Informative Phone Call.

On October 18 I received a call from a Mr. Richard Dutl, a representative of the local C.W.A. He was calling to inform me of a situation which took place at A.T.&T. Through mutual agreement Mr. Steve Parker, a Customer Service Representative in the Washington Office was dismissed of his duties. Mr. Parker was a former employee of A.T.&T. Long Lines in Washington.

Upon leaving MCI Parker went to A.T.&T. and re-applied for a position in the Long Lines Department. Mr. Dutl informs me that a Third Level Supervisor by the name of Jim Alexander informed Mr. Parker that it was A.T.&T.'s Long Lines policy that anyone leaving them and going to work for MCI was not eligible for re-hire. The case has been turned over to a Mr. C. Koons who is an attorney for the C.W.A. Dutl stated that Koons' only interest in this particular case at the present time is to place Parker back in the Long Lines Department of A.T.&T.

BOYD.

Exhibit 31

Examples of customers for which orders have been placed and processed by the telephone company but delays in installation have been caused by the telephone company

Customer name and location:

Reason for delay

- | | |
|-------------------------------|---|
| 1. E. F. Hutton, New York.. | Telco will not provide Hot Cut into Centrex; Telco will not provide except with dial access restrictions. |
| 2. F. S. Mosely, New York.. | Wrong terminating equipment provided. |
| 3. Standard Brands, New York. | Hot Cut into wrong appearance. |
| 4. Harry Alter, New York--- | Delay in notification of pair shortage until due date—took 2 weeks to provide loops. |
| 5. Booz-Allen, New York---- | Wrong interconnect. |
| 6. Gateway, Chicago----- | Loops open. |
| 7. Faulkner Dawkins, Chicago. | Unbalanced loops. |
| 8. Saks Fifth Ave., Chicago-- | No pairs available. |
| 9. Chicago Tribune, Chicago- | Ckt. termination delay (8 weeks). |
| 10. McGraw Hill, Chicago---- | Do. |
| 11. Sears, Chicago----- | Loops delivered late. |
| 12. Sears, Chicago----- | Unordered restrictions. |

City: Washington, D.C.

MCI Branch: Washington.

MCI Rep.: Andy Fulton.

Bell Assoc. Co.: C&P of Wash & Md.

Bell Rep.: John Everett

Customer: Ampex Corp.

MCI Type service: Two Way dial repeat tie line (2).

Bell Type Service: Dial repeat tie trunks.

When ordered: 11/20/73.

Type of problem (refusal, delay, poor service, etc.): Delay.

Problem: 1/21/74.

MCI is requesting the interconnect for two new dial repeat tie lines into an 800A PBX located on the customers premise in Bethesda, Md. There is presently no 65718 tie trunk equipment or 24V4's available on the customers location. I have requested that C&P give me a target date when we can expect installation on this equipment. There was some understandable delay after the order was initially send due to lack of agency letters and other misunderstandings, but this was all resolved over a month ago, and I have still not received a date for installation.

ANDY FULTON.

City: Washington.

MCI Branch: Washington.

MCI Rep.: Andy Fulton.

Bell Assoc. Co.: C&P Telco of Wash.

Bell Rep.: John Everett.

Customer: Carrol McEntee.

MCI Type Service: Ring down—SA—1.

Bell Type Service: Key appearances in 5 call directors.

When ordered: 12/10/73, due 12/21/73.

When ordered: 12-10-73, due 12/21/73.

Type of problem (refusal, delay, poor service, etc.): Delay.

Problem: 1/21/74—9:00 A.M.

In the past three weeks I have called John Everett many times—at least once or twice daily—about this interconnect. He keeps promising action, but I am still waiting. This is the only thing we are waiting for to turn up this service.

ANDY FULTON.

City: Washington, D.C.

MCI Branch: Washington.

MCI Rep.: Andy Fulton.

Bell Assoc. Co. : C&P of Wash.

Bell Rep. : John Everett.

Customer : Metromedia News.

MCI Type Service : 4—2 way dial repeat tie lines.

Bell Type Service : Dial repeat tie trunks.

When ordered : 1-10-74

Type of problem (refusal, delay, poor service, etc.) : Delay.

Problem : 1/21/74—11:00 A.M.

I have requested C&P provide us with a 6-lead interface for the hot cut of four dial repeat tie lines. John Everett feels that this may require Western wiring and will require considerable delay. He seems very doubtful that the work can be done prior to 2/11/74 (our hot cut date.). He says he has referred the problem to his traffic department. NY JCP has gone to a great deal of effort to get the 2/11/74 date from NY Tel. We need a commitment from C&P now in order to coordinate activity with New York.

ANDY FULTON.

Sample order folders for customers that have circuit terminations in Pennsylvania and which are waiting for installation (i.e., loops and equipment are installed—waiting on bell interconnection)

Account:

	City
Getty Oil-----	Philadelphia—New York.
PPG-----	Pittsburgh—Cleveland.
Do-----	Pittsburgh—Detroit.
Management Science Associates, Inc-----	Pittsburgh—New York.
L. F. Rothschild & Co-----	Pittsburgh—New York.
Faulker, Dawkins & Sullivan, Inc-----	Pittsburgh—New York.

City : Phila.

MCI Branch : Phila.

MCI Rep. : Bill Baker.

Bell Assoc. Co. : Bell of Pa.

Bell Rep. : Walt Brinkman

Customer : Shields (Wellington Mght.) MV 1295-002.

MCI Type Service : 2 way automatic ringdown pvt. line.

Bell Type Service : 400 Line Card.

Ordered bell service on 2-5-74 for 2-27-74 changed date to 4-4-74 on 2-27-74 Informed by John Fortunato that circuit was ready 3-28-74—Man on site 4-3-74 said there was no interconnect. The service was ordered as a replacement to FP67798 Bell put MCI circuit on spare key. Circuit was turned up at 1030 pm 4-4-74. There was also problem with local loop.

WILLIAM BAKER, JR.

City : Phila.

MCI Branch : Phila.

MCI Rep. : Bill Baker.

Bell Assoc. Co. : Bell of Pa.

Bell Rep. : Walt Brinkman.

Customer : Loeb-Rhoads (Phila Investment Co.) MV 1509-005.

MCI Type Service : 2-way Auto Ring Pvt. Line.

Hot cut ordered 2-6-74 for 3-17 Re new service in service 3-26-74 Bell equipment not ready.

WILLIAM BAKER, JR.

City : Phila.

MCI Branch : Phila.

MCI Rep. : Bill Baker.

Bell Assoc. Co. : Bell of Pa.

Bell Rep. : Walt Brinkman.

Customer : Loeb-Rhoads (Drexel Burnham) MV 1309-003.

MCI Type Service : 2 Way Auto Ring Pvt. Line.

When Ordered : 2-8-74.

Replace FP 11334-2 ordered for 3-18 in service 3-26-74 Bell of Pa. did not have USSO DISCO date.

WILLIAM BAKER, JR.

City : Phila.

MCI Branch : Phila.

MCI Rep. : Bill Baker.

Bell Assoc. Co. : Bell of Pa.

Bell Rep. : Joe Maylish.

Customer : Loeb-Rhoads (Prov. Nat. Bank) MV 1309-004.

MCI Type Service : 2 Way Auto Ring Pvt Line.

Replace FP 1256. Ordered service 2-8 for 3-18 in service 3-26-74 Bell of Pa. did not have USSO DISCO date.

WILLIAM BAKER, Jr.

City : Phila.

When Ordered : 11/27/73.

MCI Branch : Phila.

MCI Rep. : Bill Baker.

Bell Assoc. Co. : Bell of Pa.

Bell Rep. : Walt Brinkman.

Customer : Loeb-Rhoads (Johnson-Lehmon) MV 1309-006.

MCI Type Service : 2 Way Auto Ring Pvt Line.

Hot cut replacing FP 66208 ordered for 3-18-74, in service 3-25-74. Bell of Pa. did not have USSO DISCO date.

WILLIAM BAKER, Jr.

City : Phila.

MCI Branch : Phila.

MCI Rep. : Bill Baker.

Bell Assoc. Co. : Bell of Pa.

Bell Rep. : Walt Brinkman.

Customer : General Accident MV 1278-001.

MCI Type Service : 2 Way Dial Repeat Tie Line.

Ordered service 1-25-74. Scheduled for 2-20-74. Changed to 3-19-74 (MCI change). Slipped to 3-25-74 by Bell. Interconnect not ready. In service 3-29-74. Bell installer did not understand how he was to install service. Operator dial had to be changed.

WILLIAM BAKER, Jr.

City : Phila.

MCI Branch : Phila.

MCI Rep. : Bill Baker.

Bell Assoc. Co. : Bell of Pa.

Bell Rep. : Walt Brinkman.

Customer : Rak Assoc. (Booth, Potter & Seal) MV 1068-001.

MCI Type Service : 2 Way Dial Repeat Tie Line.

Ordered service 2-21-74. Bell first said inservice date would be 3-15-74. Changed by Bell to 3-26 (W.E. delivery). Changed by Bell to 4-1-74 (W.E. delivery). Turned up 4-2-74.

WILLIAM BAKER, Jr.

MCI TELECOMMUNICATIONS CORP.,

March 19, 1974.

Memorandum For : Larry Harris.

From : Jim Ferguson.

Subject : Pittsburgh Plate Glass.

This circuit was scheduled for 4 P.M. on 2/15. It was originally scheduled to be a 4 land interface.

When Bell arrived they started to cut circuit #1 and they ran into difficulty. It was about this time that the people in Pittsburgh asked if Bell of Pa. could cut the rest of the circuit and go home. We checked with Michigan Bell and they told us they would stay on this until they were all up and running. Bell of Pa. cut their end and left.

After many hours Michigan Bell determined that a repeat coil was missing from the 63718. He led us to believe that the repeat coil was a stock item from his dispatch location. We notified the customer and asked the customer for access and were told that the only line we could have access was on 2/19 at 7 A.M.

Michigan Bell said that our presence would not be necessary to finish the cut and he would be there at 7 A.M. He arrived at 7:15 A.M. Michigan Bell didn't arrive until 8:10.

The coil was not a stock item and he had to take coils from spare Michigan Bell equipment to the customer location. The Michigan Bell installer was unable to make the circuit work even with this coil.

Skip Knowles and the people at MCI Detroit decided to put in 4123 modules and use a six land interface. Once we went to this means, we were able to get the circuit to work.

On the 19th we had worked with Michigan Bell Engineering and Michigan Bell said they would send an Engineer out, but the Engineer never arrived. Once we went to the six land interface, everything went okay.

BELL ACTION REPORT

City : N.Y.C.

MCI Branch : N.Y.C.

MCI Rep. : Rich Kane.

Bell Assoc. Co. : N.Y. Tel.

Bell Rep. : Chris Blair.

Customer : Metromedia.

MCI Type Service : 2 way dial repeating TL.

Bell Type Service : 2 way dial repeating TL.

When Ordered : 1/7/74.

Type of problem (refusal, delay, poor service, etc.) : delay.

Problem : 1/15/74.

Customer had requested billing quote on G type tie line from Telco. Because of this Telco didn't process order from MCI. Because of Telco failure to process order and give target dates, End to End test and In service dates had to be delayed.

A. WIDER.

BELL ACTION REPORT

City : N.Y.C.

MCI Branch : N.Y.C.

MCI Rep. : Rich Kane.

Bell Assoc. Co. : N.Y. Tel.

Bell Rep. : Chris Blair.

Customer : Genesco.

MCI Type Service : 2 way dial repeating TL.

Bell Type Service : 2 way dial repeating TL.

When Ordered : 11/27/73 supp 12/3/73.

Type of problem (refusal, delay, poor service, etc.) : Delay.

Customer requested price quote from NY Tel on termination charges. Because of this Telco did not process order. Thus the original in service date of 1/14/74 was missed. Now customer does not want service until 2/13/74.

A. WIDER.

BELL ACTION REPORT

City : N.Y.C.

MCI Branch : N.Y.C.

MCI Rep. : Pat Bianchini.

Bell Assoc. Co. : N.Y. Telephone.

Customer : Hayden Stone.

MCI Type Service : Manual tie line.

Bell Type Service : Manual tie line.

When Ordered : 10/12/73.

Type of problem (refusal, delay, poor service, etc.) : Delay ; poor service.

Problem : 1/24/74.

Informed by MCI field personnel, having difficulty with interconnect. E&M leads were not extended to demark, also NY Telephone central office wiring incomplete.

A. WIDER.

BELL ACTION REPORT

City : N.Y.C.

MCI Branch : N.Y.C.

MCI Rep. : Pat Bianchini.

Bell Assoc. Co. : N.Y. Telephone Co.

Bell Rep. : Jim McKeever.
 Customer : Drexel Burnham.
 MCI Type Service : 2 WDR.
 Bell Type Service : 2 WDR.
 When Ordered : 12/10/73.
 Type of problem (refusal, delay, poor service, etc.) : Delay.
 Problem : 1/24/74.

Inform by Telco that target date of 1/24/74 for interconnect will not be met, and will not be ready until 2/27/74. The in service date of 2/4 74 has been put in jeopardy because of the situation.

A WIDER.

Exhibit 32

MCI TELECOMMUNICATIONS CORP.,
 New York, N.Y., January 15, 1974.

Mr. E. C. HANES,
 Vice President, Marketing,
 New York Telephone Co.,
 New York, N.Y.

DEAR MR. HANES: This letter is to confirm our conversation of January 8th concerning severe difficulties that we have had to date in obtaining interconnections to New York Telephone Company Centrex CO equipment. We currently have 33 of these orders outstanding with the New York Telephone Company, some going back as far as August, 1973.

The most recent interruption to our attempts to provide these services occurred on January 7, 1974. On that day, we were abruptly informed by your Business Relations people that all MCI orders of this type were "on hold" until additional information concerning the distant end equipment was provided by us. In addition to further jeopardizing all of these orders, This new immediately impacted a scheduled 1/10/74 service date for Reynolds Securities.

No opportunity was given to us at this time to obtain an understanding of why this additional data was required or how it would be used, only that our orders were "on hold" until we provided it. Previously, on November 27 1973, a NYT representative suggested that a technical conference call be established between our respective engineering people to iron out what, if any, additional information might be required by NYT engineering. Despite our subsequent continuing endeavors to establish this call, your Business Relations people have refused this.

If this information is technically necessary, it would appear that it should have been so identified well before now. I would like to point out that we have been successfully installing circuits in Centrex CO equipment for some time in a number of other locations without providing this specific information.

To date, we have been completely unsuccessful in installing MCI services where a NYT Centrex CO is involved. A number of the services have been awaiting a NYT interconnection since September, 1973. Clearly, this is an intolerable position for us to be in. Attached is a summary of the MCI orders with your company which involve a Centrex CO termination and which NYT presently has "on hold".

The problem of obtaining a suitable interval and then providing the service within that time frame, has been discussed on numerous occasions with NYT without avail. We would appreciate any help you can give in helping us to quickly resolve this situation.

For our part, since your people have refused to allow us to technically discuss additional requirements with the engineers who claim to need it, we will attempt to obtain and provide it in the format demanded as rapidly as possible. It is extremely important to us that these customers' service be no further jeopardized.

Very truly yours,

DONALD E. SMITH,
 Eastern Regional Manager.

Customer	MCI requisition	Number of circuits	Date placed with NYT	Re-requested service date ¹	Last date provided by NYT
Ketchum MacLeod ²	0014	2	Aug. 29	Dec. 10	Dec. 10.
American Export	0010	1	Aug. 27	Oct. 2	Feb. 8
Bache & Co	0013	1	Aug. 27	Sept. 21	June 1964
Arthur Anderson ²	0022	1	Sept. 11	Dec. 10	Dec. 10.
G. H. Walker	55-003A	1	Oct. 5	Nov. 16	Feb. 8
Hayden Stone	55-007	1	Oct. 12	Nov. 8	Jan. 21.
Goldman Sachs ²	55-010	1	Oct. 24	Nov. 20	Jan. 21.
E. F. Hutton	55-033	6	Nov. 19	Jan. 2	Feb. 8.
Management Associates	082	4	Dec. 4	Jan. 28	None.
Mitchell Hutchins	55-051	1	Dec. 12	Feb. 12	Do.
G. H. Walker	55-052	1	Dec. 13	Feb. 13	Do.
Dean Witter	55-058	1	Dec. 13	Feb. 13	Do.
Goldman Sachs	55-066/7	5	Dec. 17	Feb. 14	Do.
Moore McCormack	55-004/5	4	Oct. 5	Nov. 17	Feb. 1.
Reynolds	55-039	2	Nov. 27	Jan. 10	Jan. 21.
Hallgarten	55-040	1	Dec. 10	Feb. 7	None.

¹ Using 40 business day interval, except orders placed before Oct. 2, 1973 which used 18 business days, as directed. MCI will accept sooner.

² MCI subsequently has placed on-hold.

Exhibit 33

MCI TELECOMMUNICATIONS CORP.,
Washington, D.C., January 10, 1974.

Mr. ANGUS S. ALSTON,
President, Southwestern Bell Telephone Co.,
St. Louis, Mo.

DEAR MR. ALSTON: MCI has and continues to experience significant problems with the Southwestern Bell Telephone Company (SWB) in securing local distribution facilities in Dallas. On June 21, 1973 MCI forwarded a letter to SWB detailing our cable pair requirements in Tulsa, Oklahoma City, Dallas and Houston (see Attachment I). After repeated attempts to get your company to provide local distribution facilities to MCI for these cities, MCI finally received a copy of a proposed agreement from SWB in mid-October.

On October 22, 1973 MCI forwarded a signed contract to your company and on October 25, 1973 we forwarded another letter to SWB again detailing our cable pair requirements for said cities (see Attachment II).

On November 15, 1973 a new contract was sent to MCI for signature. Mr. Claude Matthews of SWB stated that the contract MCI had signed on October 22, 1973 would not be used and that the contract SWB had forwarded on November 15, 1973 would be used (see Attachment III).

November 20, 1973 MCI signed the November 15th contract and returned it to SWB (see Attachment IV).

On December 5, 1973 Mr. Matthews said that SWB had not returned the signed contract to MCI because of MCI's request for a thirty day interim agreement rather than a two year contract. On December 7, 1973 SWB forwarded a revision to the contract. On December 10, 1973 MCI returned the latest contract, signed as modified, to SWB (see Attachment V).

Approximately December 13, 1973 Mr. Matthews informed MCI that SWB would have no cable pairs available for MCI in Dallas and that the only way we could get such cable pairs would be to order them on a dedicated basis. Mr. Matthews stated we would have to put that request in writing which we did on December 13, 1973 (see Attachment VI). Mr. Matthews also informed us that there are cable pairs available in MCI's building in Dallas but that they were going to be held for SWB's customers and MCI's only alternative was dedicated facilities.

On December 20, 1973 I called Mr. Matthews and he restated that there were cable pairs available but they would not be available to MCI. I then called Mr. William Schindele, Assistant Vice President of AT&T discussing this problem in detail and he assured me that he would get back to me.

On December 26, 1973 Mr. Schindele called me back and informed me that the problem with SWB had been resolved and I would be hearing from SWB shortly.

On December 27, 1973 Mr. Paul Shaffer of SWB called and informed me that there had been a change in SWB's policy concerning supplying MCI cable pairs in Dallas. Mr. Shaffer stated that Mr. Schindele and others at 195 Broadway had been instrumental in dictating the SWB policy change. Mr. Shaffer stated that this change in policy would be that SWB would provide MCI cable pairs on an as available basis in Dallas.

Because of SWB's failure promptly to work with us for the provision of interconnections, MCI has been unable to date to service its customers in Dallas. As you can see from the facts stated in this letter far more than a reasonable amount of time passed before SWB agreed to make cable pairs available to MCI in Dallas. As you can well imagine, the financial damage to MCI as a result of SWB's actions and policies, as well as the image damage to MCI in the eyes of its customers and potential customers, has been substantial.

As of this date I am troubled that we have yet to receive written confirmation that SWB intends to provide MCI any cable pair to our building in Dallas.

I am sure you are aware that on December 31, 1973 the United States District Court in Philadelphia granted MCI injunctive relief against AT&T. The court's ruling requires all Bell System telephone companies immediately to provide MCI with interconnection for its nationwide business communications network on a basis equal to the interconnection these companies provide to Bell's own Long Lines Department. I would appreciate hearing promptly from you as to what action you are taking to expedite the correction of the harm done to MCI by SWB's previous conduct. I am confident that SWB's future actions will be in full compliance with the District Court Order, and I now look forward to an era of full cooperation between our companies for our mutual benefit, and for the benefit of our customers.

Very truly yours,

LAURENCE E. HARRIS,
Vice President.

Attachment I

MCI TELECOMMUNICATIONS CORP.,
Washington, D.C., June 21, 1973.

Mr. CLAUDE MATTHEWS,
*General Marketing Staff Supervisor,
Southwestern Bell Telephone Co.,
St. Louis, Mo.*

DEAR MR. MATTHEWS: MCI would like to place the following order for cable pair facilities under the terms and conditions of our Contract dated October 18, 1971. In order to assist you in processing this order we will require the following number of cable pairs:

Tulsa—4th National Bank Building, 15 W. 6th St., 25th floor: Aug. 15, 1973, 10; Sept. 15, 1973, 10.
Oklahoma City—City National Bank Building, 204 N. Robinson Street. Basement: Aug. 15, 1973, 10; Sept. 15, 1973, 10.
Dallas—Bryan Towers, 2001 Bryan Street, 39th floor: Aug. 20, 1973, 30; Sept. 20, 1973, 25; Oct. 20, 1973, 25; Nov. 20, 1973, 20.
Houston—Address not confirmed—will forward when available: Sept. 15, 1973, 40; Oct. 15, 1973, 35; Nov. 15, 1973, 35; Dec. 15, 1973, 40.

The cumulative total for each of these cities are: Tulsa—20, Oklahoma City—20, Dallas—100 and Houston—150.

I will provide you with our six months and one year requirements within ninety days.

Please feel free to call me if you have any questions concerning this matter. Since time is of the essence, I would appreciate your prompt attention.

Very truly yours,

LAURENCE E. HARRIS,
Vice President.

Attachment II

MCI TELECOMMUNICATIONS CORP.,
Washington, D.C., October 25, 1973.

Mr. CLAUDE MATTHEWS,
General Marketing Staff Supervisor,
Southwestern Bell Telephone Co.,
St. Louis, Mo.

DEAR CLAUDE: As indicated in Larry Harris's letter to you of June 21, 1973, we are herein providing a more accurate and extended estimate of our cable requirements including St. Louis. Specifically, I have listed our cumulative cable pair requirements for the months of January, April and October of 1974.

	January	April	October
Tulsa.....	50	100	300
Oklahoma City.....	50	100	300
Dallas.....	290	500	1,200
Houston.....	100	400	800
St. Louis.....	400	660	1,000

Our requirements are quite extensive and will now increase rapidly. It is vital that your company provide the needed cable pairs in a timely manner such that we can fulfill customer orders. We will be using these cables on an as available basis.

Please feel free to call me if you have any questions. Time is of the essence, and your prompt attention to this critical matter is appreciated.

Very truly yours,

JAMES W. McNABB,
Vice President.

Attachment III

MCI TELECOMMUNICATIONS CORP.,
Washington, D.C., November 20, 1973.

Mr. C. MATTHEWS,
General Marketing Supervisor,
Southwestern Bell Telephone Co.,
St. Louis, Mo.

DEAR MR. MATTHEWS: Reference is made to your letter of November 15, 1973 and to the agreement enclosed therewith (the "Agreement"). As you may know, the entire question of interconnection is now the subject of litigation in the United States District Court for the Eastern District of Pennsylvania. Pending the outcome of that litigation it is impossible to foresee at this time whether the relationship between MCI and the Bell System will be governed by tariff or by contract, nor the form or substance of either of those vehicles. Accordingly, I am sure you can understand that MCI is reluctant to enter into any form of long-term commitment as to local interconnection facilities under circumstances which might preclude MCI for pursuing any of its rights or enforcing any claims to which MCI believes it is entitled.

While your letter indicates that the Agreement is in fact interim since it is subject to being superseded by effective tariffs, the question of which tariff, if any, is applicable to the facilities sought by MCI is still open. As you may know, MCI has taken the position in the foregoing litigation, as it has in the past and as has the Federal Communications Commission (the "FCC"), that the interconnection facilities sought by MCI are the subject of exclusive federal jurisdiction. Accordingly, MCI does not wish to be placed in a position where it is unable to contend that any state tariffs which may become effective are of no applicability to MCI. To the extent that Southwestern Bell forces MCI to be placed in that position, MCI must make clear that it is being so placed under extreme duress.

As far as the Agreement itself is concerned, it appears to be substantially similar to the draft delivered to Mr. McNabb on October 16th and, therefore, the comments contained in our letter of October 22, 1973 with respect thereto continue to be applicable.

Attachment IV

SOUTHWESTERN BELL,
St. Louis, Mo., November 15, 1973.

Mr. LAURENCE E. HARRIS,
MCI Telecommunications Corp.,
Washington, D.C.

DEAR MR. HARRIS: I received your letter of October 22, 1973, in my office on October 29, 1973. As indicated in my letter to you of July 3, 1973, I am responsible for negotiation on behalf of Southwestern Bell Telephone Company for the provision of local distribution facilities to Common Carriers. As you can see by your failure to direct this letter to my attention there was a considerable delay in receiving it.

Several observations appear to be in order relative to your letter. First, it was our intent that the Agreement "draft" which I presented to Mr. Jim McNabb on October 16, in Tulsa, Oklahoma, be presented to the appropriate officers of your Company for review and comments to our Company. It was represented only as a draft and we specifically asked Mr. McNabb to have the appropriate officials of MCI discuss this with us so that we might prepare a final Agreement to provide local distribution facilities to be signed by both Companies. Therefore, we are enclosing Agreements for signature by the appropriate officials of MCI Telecommunications Corporation, and MCI St. Louis-Texas, Inc., in lieu of the draft Agreement which you attempted to complete and sign. The "draft" which you returned is not acceptable.

Relative to your statement you were advised that "until MCI entered into a contractual relation substantially in the form of a proposed Agreement which was furnished by Southwestern Bell (hereinafter referred to as the 'Agreement'), Southwestern Bell would not commence to modify its tariffs and submit such modifications to appropriate state regulatory authorities for approval," this was not the advice given to Mr. McNabb in our October 16 meeting. We did in fact advise Mr. McNabb of your Company that we would proceed, upon formal notification from the appropriate carrier(s) of your intent to provide services terminating at locations served by our Company and the requirement for interconnection of your tariff services with our tariff services, to take the necessary steps to include the carrier(s) in our state interconnection tariffs. Further, we have undertaken to do so in accordance with correspondence received from Mr. McNabb, and are in the process of including MCI Telecommunications Corporation in our interconnection tariffs in Texas and MCI St. Louis-Texas, Inc., in our Texas, Oklahoma, and Missouri interconnection tariffs.

In response to your comments regarding the Federal Communications Commission's October 4, 1973, letter to AT&T and relative to your comments on an interim Agreement, we feel the enclosed Agreements are in fact interim because there is a provision which states that the Agreements would be superseded by tariffs when they become effective (see Page 18, Section 9, Paragraph E).

Regarding your comments in the 3rd and 5th paragraphs of your letter, we are not nor do we intend to dictate any Agreements, apply duress or in any way force MCI to sign an Agreement which you reject in any way. Therefore, regarding the enclosed Agreements, please have the appropriate officers of MCI Telecommunications Corporation and MCI St. Louis-Texas, Inc., execute all copies if you find them acceptable on an interim basis. Please then return all copies of these Agreements to my office so that we may have them executed by our Vice President-Operations. Also please note that the Supplementary Undertaking of both Agreements require execution.

If the enclosed Agreements are not acceptable, we will be glad to discuss them with you further.

Sincerely,

C. MATTHEWS.

Enclosures.

NOVEMBER 20, 1973.

Mr. C. MATTHEWS: Since, however, there is no alternative source of supply for the interconnection facilities MCI must have to service its customers in Oklahoma and Texas, we cannot permit any reservations we may have concerning the Agreement to interfere with our obtaining even the limited facilities offered in the Agreement under whatever terms are available. Accordingly,

pending the outcome of the litigation referred to above and/or the effectiveness of a tariff filed with the FCC, MCI will order facilities under the Agreement.

We wish to advise Southwestern Bell, however, that the execution of the Agreement and the leasing of interconnection facilities thereunder may not be deemed to constitute the waiver by MCI of any right it may have to object to the terms of the Agreement nor the waiver of any legal, equitable or administrative remedies to which MCI may be entitled, including, without limitation, those remedies obtainable but for the leasing of facilities under the Agreement.

If the foregoing reservation is unacceptable to you, we would be prepared to enter into an agreement on substantially identical terms as the Agreement on a 30-day renewable basis where all parties reserve their rights as was the case with the interim agreements entered into with other Bell System companies. In the meantime we are returning all six copies of the Agreement duly executed by an authorized officer of MCI.

Sincerely yours,

LAURENCE E. HARRIS,
Vice President.

Attachment V

MCI TELECOMMUNICATIONS CORP.,
Washington, D.C., December 10, 1973.

Mr. C. MATTHEWS,
*General Marketing Staff Supervisor,
Southwestern Bell Telephone Co.,
St. Louis, Mo.*

DEAR MR. MATTHEWS: On behalf of MCI Telecommunications Corporation and MCI St. Louis-Texas, Inc. please find enclosed two executed copies of an Agreement dated December 7, 1973 between Southwestern Bell Telephone Company and MCI Telecommunications Corporation and MCI St. Louis-Texas, Inc., respectively. Page 18 of each of the foregoing Agreements was initialed as requested in your letter of December 7, 1973.

Sincerely yours,

CHERIF SEDKY,
Assistant General Counsel.

Attachment VI

DECEMBER 13, 1973.

Mr. C. MATTHEWS,
*General Marketing Supervisor,
Southwestern Bell Telephone Co.,
St. Louis, Mo.*

DEAR MR. MATTHEWS: MCI hereby requests that you provide us with a quote for the special construction of facilities in Dallas and Houston, Texas. Specifically this quote is for facilities terminating at the MCI terminals in each city. The addresses are 2001 Bryan Street in Dallas, Texas and One Shell Plaza in Houston, Texas.

We request that you prepare special construction quotes for 400 cable pair in Dallas and 100 cable pair in Houston. Further, it is our understanding that if MCI orders a dedicated compliment, that prior monies spent for special construction will be appropriately credited to the construction of a dedicated compliment.

We also desire that you provide MCI with a quote for dedicated facilities in both Dallas and Houston. Specifically, we would like to have you provide a quote for 400 and 900 cable pair in Dallas and 400 cable pair in Houston. However, it is extremely important that the preparation of this quote for dedicated compliments not interfere with or take precedent over the preparation of the quote for special construction.

MCI would also like included in the preparation of these quotes, a 900 pair riser cable in Dallas and a 600 pair riser cable in Houston.

It is our understanding that you will expedite the preparation of these quotes and that we can reasonably expect a response next week on the special construction quote. It is also our understanding that you will make every effort to provide prices for 200 cable pair under special construction if it will not delay the quote for 400 cable pair.

These quotes are now holding up MCI's ability to provide service to its cus-

tomers and we therefore request that Southwestern Bell make every effort to expedite this matter.

Sincerely yours,

JAMES W. McNABB,
Vice President.

Exhibit 34

City: Wash, D.C.
MCI Branch: Wash.
MCI Rep.: Nelson Boyd/Andy Fulton.
Bell Assoc. Co.: C&P.
Bell Rep.: J. Everett.
Customer: Chas Pfizer & Co.
MCI Type Service: FX—MX 1026—007.
Bell Type Service: FX 18633.
When Ordered: 1-7-74

Type of problem (refusal, delay, poor service, etc.): Delay.

Problem: C&P notified on 3/22/74 that date for cut was being moved up to 3/25/74. They said that a call to SSMB was all that was required. On 3/25/74 SSMB & J. Everett said could not change without paper work. JCP asked salesman to sup order in A.M. As of 2:20p C&P had not recd sup & would not do work.

NELSON BOYD.

Exhibit 35

City: Wash, D.C.
MCI Branch: Wash, D.C.
MCI Rep.: N. Boyd.
Bell Assoc. Co.: C&P.
Bell Rep.: Mike Bradley, Bill Swanson.
Customer: Motor Vehicle Manufacturers Association.
MCI Type Service: 2 WDR.
Bell Type Service: 2 WDR.
When Ordered: 1-3-74.
When Refused: 3/29/74.

Type of problem (refusal, delay, poor service, etc.): Delay—not ready for cut.

C&P SSMB refuses to work hot cut because LL SSO issued with 4/12 DD. LL won't authorize hot cut on trunk circuits prior to DD on SSO. C&P not engineer for hot cut.

N. BOYD.

BACKLOG CONTROL FLASH

Date 3/29/74; Time: 3:45p.
Originator N. Boyd, Washington Branch Operations.
Customer Motor Vehicle Manufacturers Association.
Order: I 201-0106.
Circuit: MV 1287.
Control office: Detroit.
Destination(s) Det.-Wash.
Action: Deferred Schedule.

EE 3/28/74. INS 3/29/74. D/D /4/16/74.

Jeopardy description: C&P SSMB wont hot cut—LL won't authorize hot cut prior to DD on SSO (4/12). C&P not eng for hot cut.

Name	Communications media			
	FAX	MAIL	TEL	PER
Resolution responsibility:				
<input type="checkbox"/> Sales				
<input type="checkbox"/> Engineering				
<input type="checkbox"/> Control terminal				
<input type="checkbox"/> Noncontrol terminal			J. Kenyon	
<input checked="" type="checkbox"/> Regional staff			J. Ferguson	
<input type="checkbox"/> Regional manager				
<input type="checkbox"/> District manager			F. Noble	
<input checked="" type="checkbox"/> Legal department			L. Harris	
<input type="checkbox"/> HQ operations			C. M. Vorner Brugge	
<input type="checkbox"/> Other				

Exhibit 36

MCI TELECOMMUNICATIONS CORP.,

February 19, 1974.

Memorandum For: Larry Harris
Subject: Shewbir Williams.

This circuit was scheduled for 2/15 and Michigan Bell missed the due date. The way it was originally scheduled, it was to be cut on 2/15 at 4 P.M. This was a cold cut.

Michigan Bell was supposed to perform their part of the cut some time prior to 4 P.M. on 2/15. I believe it was scheduled to be done by the close of business on 2/14.

At 4 P.M. on 2/15 Michigan Bell still was not there. When they finally sent someone at 4:30 P.M. he had no drawings, no listing of options and was completely unprepared to perform the cut.

The circuit was rescheduled for Monday, 2/19 and when Michigan Bell came and did their part of the cut, everything went fine.

MCI TELECOMMUNICATIONS CORP.,

January 22, 1974.

Memorandum For: L Harris.
From: E. L. Braunston.
Subject: Getty Oil—January 9, 1974.

0930—Received call from Ed Weibrecht saying he got a call from A.T.&T. Rep (Stu Pearson) who received a call from Bell Engineer, saying that dates of 1/10 couldn't be met, due to extensive rearrangement of equipment at customer location. They are saying new date will be 3/15/74.

1000—Called Joe Rizol. He said that the account was given to Walt Brinkman. Checked with Brinkman and he verifies new dates. I questioned why we weren't informed. He didn't know and would try and find out reason.

1300—Called for Rizol or Brinkman. They weren't available. (Out of the office.)

1320—Called and reached Brinkman. Asked who Engineer was (Bob Kinter), but wouldn't give me his phone number. Said he would have him call me.

1330—Found Kinter's number (466-2587) and tried to call Engleman or Green. They are going to call Bell Engineer to get straight story. Engleman calls Bell Engineer who says that operation is now 2 wire D.X. on 5 of 6 circuits. Bell will now meet us T-R E&M on 5 circuits, 001 through 004 and 006. On 005 they will meet us 6 leads. The new date will be January 18. Hot cut. To accomplish this change we must modify our station packages to utilize a 443 rather than a 4123. Spoke with O'Malley and he says that the date from Chuck Johns was a tentative date 1/10 - 1/27, but they were at fault in not notifying us of the problem involved.

Exhibit 37

City: Philadelphia.
MCI Branch: Philadelphia.
Customer: Getty Oil.
Type of problem (refusal, delay, poor service, etc.): Delay.
Problem: See log.

Exhibit 38

City: Pittsburgh.
MCI Branch: Pittsburgh.
MCI Rep.: John A. Gergely.
Bell Assoc. Co.: Bell of Penna.
Bell Rep.: Mrs. Cheryl Decker.
Customer: Williams and Company, MV 1149-001, I2070051A.
MCI Type Service: 2 way dial repeating tie line.
Bell Type Service: Into a CO Centrex
When Ordered: March 11, 1974.
Type of problem (refusal, delay, poor service, etc.): Delay.

Standard interval for committing a interconnect date into a CO Centrex is 5-7 working days after the order is received. It was received on March 11, 1974. It has been 11 working days and we have still not received a commitment date from Bell of Pennsylvania.

JOHN GERGELY.

Exhibit 39

City : Chicago.
 MCI Branch : Chicago.
 MCI Rep : Dee Lewis.
 Bell Assoc. Co. : IBT.
 Bell Rep. : Dan Kocher.
 Customer : J. Walter Thompson.
 MCI Type Service : Multipoint data.
 Bell Type Service : A house pair.
 When Ordered : 12/12.
 Type of problem (refusal, delay, poor service, etc.) : Delay.
 Problem : 12/29.

The customer is located on the 26th floor of J. Hancock Bldg., MCI terminal is on the 93rd floor of the same building. We requested a house pair on 12/12 to connect the two from Bell and was informed on 12/19 that such an arrangement was "special" and would require 6 weeks just to price and an indefinite period toward final installation. They offered to give us a "normal loop" which would run from the 26th floor, to the 16th floor, to the Superior St. Central Office (a ½ mile distant), back to the 16th floor, and finally to the 93rd floor. The customer has indicated he would be extremely unhappy with this arrangement since it means more distortion for his data line. Furthermore, on 12/7, at the time of the site survey the customer stated that he would seek his own legal counsel if Bell refused to comply with his wish to stay within the building. Coincidentally, on January 4th, we sent a letter to Bell stating our understanding that the loop would be ready Jan. 9th and asking for their comment if they felt it wouldn't be. They did not respond. The promised installation date of 1/17 now seems out of the question.

ROBERT G. WHITE.

City : Chicago.
 MCI Branch : Chicago.
 MCI Rep. : Dee Lewis.
 Bell Assoc. Co. : Illinois Bell.
 Bell Rep. : Dan Kocher.
 Customer : J. Walter Thompson.
 MCI Type Service : Multipoint data.
 Bell Type Service : A house pair.
 When Ordered : 12/12/73.
 Type of problem (refusal, delay, poor service, etc.) : Delay.
 Problem : 1/11/74, 2:30 P.M.

Called Dan Kocher and requested that he expediate the installation of the house pair loop for J. Walter Thompson on the basis of it not leaving the Hancock Building and making our due date of January 17th. Mr. Kocher said he would try to do whatever was possible, and if he was successful, we should not consider this a regular practice. We will keep this report open pending Bell's completion of the loop installation.

J. ANTANIES.

Exhibit 40

City : Chicago.
 MCI Branch : Chicago.
 MCI Rep. : D. Lewis/J. Antanies.
 Bell Assoc. Co. : Illinois Bell.
 Bell Rep. : P. Overmyer.
 Customer : Smith-Barney.
 When Ordered : 11/15/73.
 When Refused : See Narrative.
 Type of problem (refusal, delay, poor service, etc.) : Delay - "Lost Orders".
 Problem : See Attached.

J. ANTANIES.

MCI TELECOMMUNICATIONS CORP.,
Chicago, Ill.

To: John Antanies.
From: Robert White.
Date: January 24, 1974.
Subject: **Smith Barney In A Nutsell.**

11/15—Order loops and interconnects. These orders were communicated in detail over the phone and mailed in written form. They are to replace verbatim, previously installed AT&T full period lines.

11/16—P. Overmyer of IBT called advising that order could not be processed due to lack of SSO numbers.

12/10—Delay at New York MCI caused by New York Telephone's refusal to supply an interconnect due date for C.O. Centrex service. SSO numbers are thus impossible to obtain.

12/12—New York Telephone provides due dates. New York MCI provides SSO numbers. Numbers given to P. Overmyer of IBT along with list of the AT&T Long Line circuit designations of the lines we are replacing. Due dates of 1/21 and 1/22 established.

01/11 A.M.—A summary list of outstanding orders due the next two weeks verbally assented to by P. Overmyer. The list is sent to IBT as a reminder. Smith Barney is on the list for 1/21 and 1/22.

01/11 P.M.—Dee Lewis, MCI, was informed by P. Overmyer that IBT marketing wrote up interconnect order for 1/31 (F.D.D. date of SSO) and thus the order wasn't written until today. Thinks there is little possibility of making 1/21 and 1/22. Will check work load with PBX foreman and call back.

01/12—P. Overmyer says he has verbally contacted everyone involved in the IBT installation and now believes all will go as scheduled.

01/15—A second summary list, advanced one week from the first, is verbally assented to by P. Overmyer. He still believes Smith Barney will go 1/21 and 1/22.

01/17—P. Overmyer says that the SSO number for F.P. 21149-079 (3136-8065) is not any good. The order must be held up.

01/17—Upon advisement from MCI New York, Chicago MCI gave IBT the appropriate AT&T representative who verified that the number in question was indeed good.

01/18 A.M.—Dee Lewis, MCI, calls P. Overmyer of IBT to verify Smith Barney cut dates. P. Overmyer says he's not positive; but will be in the afternoon.

01/18 2:30 P.M.—Dee Lewis, MCI, receives a call from P. Overmyer who says he "thinks it will go".

01/18 4:15 P.M.—P. Overmyer of IBT called. We will not be able to hot cut any of the eight circuits on either 1/21 or 1/22. This was because the original order was lost between the IBT representative and IBT marketing. A new order had to be issued by IBT. He said because the second order was so late in arriving, the work could not be completed in time.

01/21—John Antanies and Scott Brodey, MCI, called Dick Smith of IBT to escalate trouble.

01/21—P. Overmyer of IBT called back and gave us new dates of 1/30 and 1/31.

City: Chicago.

MCI Branch: Chicago.

MCI Rep.: J. Antanies.

Bell Assoc. Co.: Illinois Bell.

Bell Rep. P. Overmyer.

Customer: Smith-Barney.

When Ordered: 11/15/73.

When Refused: See Narrative.

Type of problem (refusal, delay, poor service, etc.): Delay - "Lost Orders".

J. ANTANIES.

1/30/74—11:03am: James Speirs, MCI CSR, performing installation cut at Smith-Barney advised Robert White, Operations Manager - MCI, that the Illinois Bell Telephone installer would not perform the 4 circuit cut on January 30, 1974, since his orders specified cutting all 8 circuits on January 31, 1974.

1/30/74—11:35am: I, John Antanies, attempted to call Richard Beal, District Staff Supervisor - IBT, and William Smith, Division Marketing Manager - IBT, both of whom were at lunch. I contacted Richard Smith, Assistant Vice President Marketing - IBT, and advised him that the installer had incorrect orders and said the cut would not be performed today, January 30. I explained all of the previous problems Illinois Bell had experienced attempting to meet the installation date and asked for his help.

1/30/74—1:30am: James Speirs advised Robert White that two Illinois Bell installers and an Illinois Bell supervisor were on site and would cut the first 4 circuits per agreement.

1/30/74—5:00pm: James Speirs called in and asked for help—the Illinois Bell installers were still unable to make the first circuit they had cut at about 1:30pm: work.

1/30/74—5:00pm to 9:10pm: William Munday and myself related optioning instructions via James Speirs to the installers.

1/30/74—9:10pm: Illinois Bell installers advised us they were going home for the night and that they had to catch their trains. We asked for the telephone number of their foreman or how we might make arrangements for Illinois Bell to carry on with the job. The Illinois Bell installer, Jim Steffrins, advised us there was no help available. William Munday and I went to the customer's premise and determined that approximately 1 hour would be required to make the circuits operational. I called Larry Harris and advised him that Bell had abandoned the job with 4 of Smith-Barney's circuits inoperative and requested his concurrence for us to make the connections required in the Bell equipment. I connected the leads on the 2nd, 3rd and 4th SD65718-02 in a very temporary manner, and we checked the operation of the equipment—the circuits worked. The leads were temporarily connected in such a manner so that Illinois Bell's regularly paid employees would not be denied any work and would be required to permanently connect the leads.

1/31/74—9:40am: G. Scott Brodey, Jerry Brilliant and John Antanies visited Richard Smith to advise him of the problems experienced with Illinois Bell and to explain what work I had done at the customer location with Illinois Bell equipment and why. Mr. Smith said he would investigate why Illinois Bell's orders carried the wrong installation dates.

1/30/74—10:10am: At the conclusion of our meeting with Mr. Smith, we had a short meeting with William Smith, Phil Overmyer, Dan Kocher and Dick Beal, none of whom could explain why the orders carried the wrong dates.

1/31/74—11:15am: G. Scott Brodey, Jerry Brilliant and John Antanies visited the customer location and were advised by James Speirs that the Illinois Bell installer had removed all temporary wiring on all circuits simultaneously at approximately 8:00 A.M. that morning thus making all 4 circuits inoperable. The Illinois Bell union representative threatened a walk-out if Illinois Bell and MCI worked simultaneously in the same equipment space provided by the customer. We agreed therefore to leave the area while Illinois Bell was working and to return when they completed their portion of the work and/or took a coffee break or went to lunch.

The first time we re-entered the space to perform our tests on the now rewired circuits, we found the telephone installed on the customer's switching equipment for test purposes disconnected by Illinois Bell so we had no way to communicate with our terminal except to use a customer phone located in his office space. We were advised by Illinois Bell that this phone had been installed at no cost to the customer for Illinois Bell testing purposes, and MCI would not be permitted to use it.

Exhibit 41

Memorandum

MCI TELECOMMUNICATIONS CORP.,

September 25, 1973.

For: Bill McGowan.

From: Bert Roberts.

Subject: Bell refusal to provide service—PUC approval.

Dick Furnival, MCI Cleveland Branch Manager, has related to me that he has placed the following orders for local loops and interconnection with Ohio Bell:

	<i>Circuits</i>
SCM -----	10
PPG -----	11
Gateway -----	3
Rothschild -----	1
Midland Ross -----	1
Addressograph -----	3
Total -----	29

Ohio Bell will not terminate MSI's leased facilities on the Ohio Bell terminating equipment in a manner that will provide for interconnection until such time as they receive approval of the revised tariffs from the PUC of Ohio. (see attached letter)

Tom Mullaney, MCI Pittsburgh Branch Manager, indicated that he has the following local loops on order for Bell of Pennsylvania:

	<i>Circuits</i>
PPG -----	18
Rothschild -----	2
Management Sciences -----	1
Merck -----	2
Ketchum Macleod -----	2
Faulkner, Dawkins -----	1
Dean Whitter -----	1
Pittsburgh National -----	2
Total -----	29

Mr. Larry O'Malley of Bell of Pennsylvania stated on August 28, 1973, that Bell of Pennsylvania would not interconnect MCI's leased facilities on their terminating equipment until such time as the Pennsylvania PUC approves their tariff modifications. It should be noted that on August 28, 1973, Bell of Pennsylvania had yet to file this tariff modification according to Messrs. Larry Harris and Jim McNabb.

Exhibit 42

City: Baltimore.

MCI Branch: Towson.

MCI Rep.: Warren Davis.

Bell Assoc. Co.: C. & P. of Md.

Bell Rep.: Bill Davis.

Customer: Koppers, Maryland, MD1198001.

MCI Type Service: 2400 data.

Type of problem (refusal, delay, poor service, etc.): Movement of demark.

Problem: 03-22-74, 1530.

C & P placed demark for 36MC54 in requested space then moved demark to inaccessible room 100' away. Will cause MCI two-three hours additional work to meet demark.

Move was in accordance with Bill Davis (SSMB) Installation Practices for single occupancy building and coam equipment.

W. DAVIS.

MCI TELECOMMUNICATIONS CORP.,

Washington, D.C., March 26, 1974.

Mr. THOMAS E. BOLGER,

President,

Chesapeake & Potomac Telephone Co.,

Washington, D.C.

DEAR MR. BOLGER: On Thursday, March 21, 1974, your company took certain actions which adversely affected our valued relations with Koppers Maryland, an MCI customer.

On March 18, 1974, C&P installed a loop demarcation point in the space requested by MCI. On March 21, 1974, C&P moved that demarcation point to a

boiler room approximately 100 feet away. When MCI inquired into why C&P moved the demarcation point, Bill Davis, C&P, stated that this is C&P's installation practice for a single occupancy building involving COAM equipment.

On Friday, March 22, 1974, MCI complained to your Business Relations Representative, Jack Reams, about the moving of the demarcation. On the following Monday, Jack Reams informed MCI that the demarcation point would be moved back to a satisfactory location. However, as we had made a commitment to our customer to provide service on March 25, 1974, we had no choice but to proceed with cabling to the boiler room demarcation point.

As the installation was nearing completion on March 25, 1974, C&P arrived on our customer's premise and moved the demarcation point back to its original location. Our customer was inconvenienced and MCI incurred additional expenses for added cable and extra man hours.

Not only did your action cause financial harm to MCI, but it also severely impacted our image in the market place. It is quite interesting that while you personally, in your speeches, complain about the financial impact of competition on your monopoly service subscribers, you are spending their money to move demarcation points that are already in place in order to cause MCI as much aggravation and financial harm as possible.

Your reasons for these actions are irrelevant except insofar as they result in implications of antitrust violations and spending of rate payers money to fight competition. I would like to know what actions you and your company are taking to stop this harassment of MCI and its customers.

Very truly yours,

LAURENCE E. HARRIS,
Vice President.

Exhibit 4.—*Statement of Telecommunication Association of New Jersey
Re Interconnect Industry*

TELECOMMUNICATION ASSOCIATION OF NEW JERSEY.
West Paterson, N.J., June 19, 1974.

MR. G. HELLERMAN,
*Senate Subcommittee on Antitrust and Monopoly,
Washington, D.C.*

DEAR MR. HELLERMAN: The Telecommunication Association of New Jersey, a consumer-oriented, dues-paying association, was established to protect the consumer against the anticompetitive policy of AT&T. Pursuant to that aim, we have established our position vis-a-vis the interconnect industry and I am enclosing a copy of this for your records.

We firmly believe that a regulated monopoly is unnatural in our economy and the size is detrimental to the individual consumer requiring telecommunication services.

If you have any questions concerning our position, please do not hesitate to contact me.

Yours very truly,

MARTIN F. McDERMOTT III,
President.

Enclosure.

AN INTERCONNECT INDUSTRY
POSITION STATEMENT

The Bell System considers that it is, of necessity, and because of the nature of its service as a public utility, different from all other public utilities. The premises for their argument is that all the other utilities are feeding water, transportation, electricity, etc., to the consumer, whereas it must receive input from its customers' premises in the form of electrical voice and pulse information, as well as deliver such services to it. This premise has been used to justify the manufacture of all its exchange and terminal equipment solely by Western Electric, and the installation, rental and servicing of same on its customers' premises, excluding all competition. In fact, we respectfully submit (and the Carterfone Decision confirms our position) that the Bell System has extended itself far beyond what are truly common carrier functions which justify the creation of a natural regulated monopoly. The result has been the

regulation of many services that do not require regulation because the best interests of the public from all standpoints can be better served through the mechanism of competition and unregulated free enterprise.

The *only* function of our communications network that is truly a common carrier function and therefore requires regulation is the *transmission* in both directions of *electrical* voice and pulse information within certain established parameters. The *conversion* of voice and sound waves and the mechanical switching into electrical energy need not and should not be regulated, so long as they satisfy the need to protect the integrity of the common carrier network. Neither does the *reconversion* of that energy into mechanical functions by means of transducers, etc. at the other end of the network require regulation. That is basically what Carterfone is saying. Therefore, the public should have the choice of what equipment they want installed on their private premises, and from whom they wish to purchase, rent or lease. The result has been the birth of the interconnect industry.

The major problem that Carterfone does not solve is: how can private, unregulated free enterprise, under the best of circumstances, compete on any kind of an even-handed basis with a giant, regulated common carrier enjoying a guaranteed profit and all the power and influence that belongs of necessity, to such a pseudo-governmental type of entity? Its revenues are almost a form of taxation without representation.

We, in the interconnect industry, submit that the responses of the Bell System to the Carterfone Decision make it impossible for private industry to compete. We refer to:

1. The Bell System's insistence on providing whatever protective devices may be required instead of permitting its customers to purchase same as an integral part of equipment manufactured under a certificated or licensing program;

2. The predatory, anti-competitive pricing changes it has made cloaked under the legality of tariffs approved by regulatory bodies;

3. The expansion of its business into areas such as voice paging on customer's premises (certainly not a common carrier function by even the greatest stretch of the imagination) again cloaked under the legality of state utility commission approved tariffs;

4. The tremendously expensive advertising, public relations, and quasi-legislative programs it has launched aimed at killing off the infant interconnect industry (subsidized from the assured revenues it enjoys as a regulated monopoly);

5. The thousands of subtle pressures it has exerted to discourage its customers from exercising their legal rights under Carterfone resulting in the understandable and very real (even if unfounded) fears that the subscriber experiences when faced with an interconnect choice;

6. The delaying and confusing tactics it has pursued to hinder and complicate the interconnect industry in its attempts to serve the customer;

7. The cross-subsidization of its services to enable it, on the one hand, to lower the tariffs on those services which compete with the interconnect industry, and on the other hand to raise the tariffs on interconnect arrangements and those services it *alone* can render as a network common carrier;

8. The pressures it has exerted on all the state regulatory bodies to assist in its combative efforts by approving its tariff petitions and by issuing "anti-interconnect" regulations (at least insofar as so-called intra-state communication is concerned);

9. The argument, without a shred of evidence, that the economic impact of interconnect will be contrary to the best interests of the public because it is bound to result in increased prices on its service to compensate for the reduction in its revenues.

Mr. Kleinert, President of New Jersey Bell, in the September 1972 issue of "New Jersey Business", as a solution to the interconnect problem, stated: "Either we have to be deregulated in competitive areas, or the competition has to come under the regulatory agency". This statement is a public, official admission that where competition exists, regulation is abhorrent in our politico-economic philosophy, and for this reason (with this glaring exception) has been restricted to natural public utility monopoly functions and services. Therefore, Mr. Kleinert's suggestion that "we have to be deregulated in competitive areas" is appropriate. But just how does one deregulate a monopoly in the competitive area of its activities? The question itself emphasizes the

paradox. We submit that the only way this can be done is by a *total* divestiture of all plant, facilities, functions, capital and staff that comprise such "competitive areas". The interconnect industry is ready to compete with such a newly formed, unregulated entity. Mr. Kleinert may have unwittingly suggested the solution to this massive, complex and difficult problem. All of the Bell System's antagonistic responses to the Federal interconnect policy would evaporate. Cross-subsidization would become impossible. Since such a newly formed entity or entities would become a part of the unregulated, competitive relationships to exist as in the rest of our economy.

Although Mr. Kleinert's alternative solution may be viewed by many as "nonsense", it obliges our industry to reply:

1. As suppliers of equipment we are no more a common carrier than Western Electric or any other manufacturer that supplies a public utility.

2. The installation and maintenance of terminal equipment on subscriber premises is no more a public utility common carrier's function than the installation, protection and repair of electrical appliances, gas-fueled heaters and refrigerators, water pumps, pressure reducers, sprinklers and other on-premises distribution and use equipment. The definition of the telephone common carrier function, as set forth above, supports this contention. Our industry should no more be regulated than electrical contractors and appliance installers and repairmen who connect to and use power provided by regulated electric public utilities.

NOTE.—A case in point is the interconnection of teletype equipment over telephone lines. Conversion of electrical energy to voice waves is basically no different than conversion to operation of a typewriter.

All of the above convinces us in the interconnect industry that the Federal Government must further implement Carterfone by establishing a definite transition period, at the end of which time, the Bell System must be limited to performing strictly common carrier functions. In other words, just as the electric utility cannot manufacture, sell, install, maintain or rent motors, appliances, lights, etc., the phone company natural monopoly must also terminate at the building line. It also convinces us that the Western Electric should no more be the sole supplier of telephone exchange equipment than any one electrical manufacturer should be the sole source of supply of generators to the electric public utilities. Divestiture of Western Electric would then result in its becoming another member of the interconnect industry competing to supply all the cable and equipment needs of the regulated Bell System, as well as all the needs of the users of its national network. Only in such an environment would the state regulatory bodies have yardsticks to compare the efficiencies and costs of the telephone companies they regulate in the various states. Distributions of revenues differentiating between interstate and intra-state would be greatly simplified. Finally, the common carrier would be stripped of the least efficient and highest cost parts of its operations: namely, Western Electric Company monopoly manufacture and on-subscriber-premises sales, installation and maintenance. It would retain the most highly automated portion of its operation where close supervision of costs and personnel is feasible. The new capital requirements would be decentralized so that AT&T would not have the impact on the capital markets resulting from the fact that its requirements alone account for one-fourth of the total needs of the country. Finally, there is much evidence to support the contention that the public would enjoy markedly reduced communication costs.

If this suggested Federal action and power are not brought to bear immediately on this vitally important segment of our economy, the interconnect industry is doomed to fail, even before it gets on its feet. We have had just a glimpse of the marvelous systems and features that competition has brought to the voice communications industry. Are we to let it die, and never know either its blessings or the economies that would result from the Bell System's tending strictly to its truly common carrier functions?

Exhibit 5.—*Minutes of ACCTS Meeting of April 18, 1972 (Excerpts)*

AIRLINES COORDINATING COMMITTEE FOR TELEPHONE SERVICE,
Annapolis, Md., June 15, 1972.

To: Airlines Coordinating Committee for Telephone Service.
Subject: Minutes of the Twentieth Meeting—April 18, 1972.

OPEN SESSION

The Open Session of the Airlines Coordinating Committee for Telephone Service (ACCTS) was held at the Radisson South Hotel, Minneapolis, Minnesota, on April 18, 1972. Chairman R. L. Kirkpatrick opened the Meeting at 9 A.M. with the following in attendance:

AC—A. McCleery
 AL—W. A. Ryder, Jr.
 BA—P. Freeman
 BN—J. R. McCoy
 CO—C. M. Huntley
 CP—D. Fraser
 EA—P. A. Orton
 NA—W. E. Morris
 NC—S. N. McLeod
 NE—P. W. Sewall
 NW—R. L. Kirkpatrick; W. Piper
 OZ—J. L. Stone
 PA—T. Ferrero
 QF—R. D. Benjamin
 RW—B. F. Donohoe
 SO—S. L. Perry, Jr.
 TT—W. C. Wirth
 TW—R. W. Peterson
 UA—W. F. Johnson; G. Sparks
 WA—F. L. Reilly
 XA—S. H. Ewell; P. A. Luxion; T. H. Taylor

The following of the communications common carriers and manufacturing organizations were present:

ADR—J. Richardson, Princeton, New Jersey
 AT&T—T. J. DeWitt, New York, New York; C. Jaeger, Minneapolis, Minnesota; R. G. Oanes, Minneapolis, Minnesota; J. W. Vitt, Minneapolis, Minnesota; N. Zander, Minneapolis, Minnesota
 GTE Service Corp.—W. B. Sherlock, New York, New York
 GT&E of the Southwest—A. Brown, Irving, Texas
 General Telephone Company of Florida—E. Clary, Tampa, Florida
 General Telephone of the Southwest—B. Strickland, Arlington, Texas
 Hawaiian Telephone Company—G. Montgomery, Honolulu, Hawaii
 IBM—M. Tilley, White Plains, New York
 ITT Worldcom—L. Palmer, New York, New York
 Megadata—C. Stock, Deer Park, L.I., New York; R. Richards, Deer Park, L.I., New York
 Milgo Electronic Corporation—R. Fraser, Miami, Florida
 Northwest Bell—D. B. Bridenstine, Minneapolis, Minnesota; C. R. Cooke, Minneapolis, Minnesota; D. W. Hammond, Minneapolis, Minnesota; B. L. Hill, Omaha, Nebraska; R. J. Lindgren, Minneapolis, Minnesota; D. A. Stuermer, Minneapolis, Minnesota; L. Swanson, Minneapolis, Minnesota; C. Traver, Minneapolis, Minnesota
 Philco-Ford—C. Sletto, Houston, Texas; S. Grooms, Houston, Texas
 Phonplex Corp.—M. Slavin, Huntington, L.I., New York
 Teletype Corp.—D. J. Jakovich, Skokie, Illinois
 United Utilities—W. Halford, Shawnee Mission, Kansas
 United Telco of Missouri—I. Oestreich, Platte City, Missouri

OPENING REMARKS

Mr. G. Holmes, General Marketing Manager for Northwestern Bell Telephone Company welcomed ACCTS to Minneapolis on behalf of Northwestern Bell and the Bell System.

* * * * *

ADMINISTRATIVE SESSION

The Administrative Session of ACCTS convened at the Radisson South Hotel, Minneapolis, Minnesota, as scheduled on April 19, 1972. Chairman R. L. Kirkpatrick opened the Meeting at 8:30 A.M., with the following in attendance:

AC—A. McCleery
 AL—W. A. Ryder, Jr.
 BA—P. Freeman
 BN—J. R. McCoy
 CO—C. M. Huntley
 CP—D. Fraser
 EA—P. A. Orton
 NA—W. E. Morris
 NC—S. N. McLeod
 NE—P. W. Sewall
 NW—R. L. Kirkpatrick; W. Piper
 OZ—J. L. Stone
 PA—T. Ferrero
 QF—R. D. Benjamin
 RW—B. F. Donohoe
 TT—W. C. Wirth
 TW—R. W. Peterson
 UA—W. F. Johnson; G. Sparks
 WA—F. L. Reilly
 XA—J. L. Bartlett; S. H. Ewell; P. A. Luxion; T. H. Taylor

Bell system special report

T. DeWitt, AT&T, outlined Bell System's future plans regarding ACD and PBX units. In broad terms, he related telco's consideration of providing equipment purchase arrangements. To the consternation of many members, AT&T related that a decision regarding new generation ACD units would not be made before 1975, and if affirmative, units would not be available until 1980.

Minutes

It was moved by W. Johnson, UA, and seconded by P. Orton, EA, that:

The reading of the minutes for the previous meeting be waived.

Motion carried unanimously.

It was moved by B. Donohoe, RW, and seconded by W. Morris, NA, that:

The distributed minutes of the previous meeting be approved.

Motion carried unanimously.

Report of the nominating committee for vice chairman

The Committee nominated Mr. J. McCoy, BN, for the one year term of Vice Chairman beginning July 1, 1972.

There being no further nominations, Mr. R. Benjamin, QF, moved and W. Ryder, AL, seconded that:

Mr. J. McCoy became vice chairman of ACCTS for a one year term beginning July 1, 1972.

The vote was unanimous.

The Nominating Committee further reported that as a result of Mr. McCoy's election there was a vacancy on the Steering Committee. They proceeded by nominating Mr. P. Orton, EA, for this unexpired Steering Committee term. There being no further nominations, W. Ryder, AL, moved, and J. Stone, OZ, seconded that:

The nominations for a new steering committee member be closed.

Mr. P. Orton, EA, was unanimously elected to the Steering Committee for the term expiring December 31, 1972.

General PLIN items

Mr. S. H. Ewell, XA, reviewed various PLIN related subjects and commented on the recent ARINC reorganization.

Regulatory

Mr. J. Bartlett, XA, gave an excellent presentation regarding active FCC Dockets affecting the air transport industry.

Disposition of working group reports

COMMUNICATIONS MANAGEMENT INFORMATION WORKING GROUP

Mr. C. M. Huntley, CO, announced that his group was moving ahead according to the dictates of ALCAC and would now be referred to as the Communications Management Information Working Group. He further polled the full committee on the value of the group's proposed undertaking to develop an optimized trunk program as well as MT/FT WATS mix program.

It was moved by W. Morris, NA, and seconded by S. McLeod, NC, that:

The plans and report of the communications management information working group be accepted.
Motion carried with UA abstaining.

PRODUCT AND SERVICE EVALUATION WORKING GROUP

Mr. P. Orton, EA, stated that in light of Bell System's apparent concern regarding the introduction of new generation ACD units it seemed timely to review and reissue to interested vendors the ACCTS guidelines for future ACD installations.

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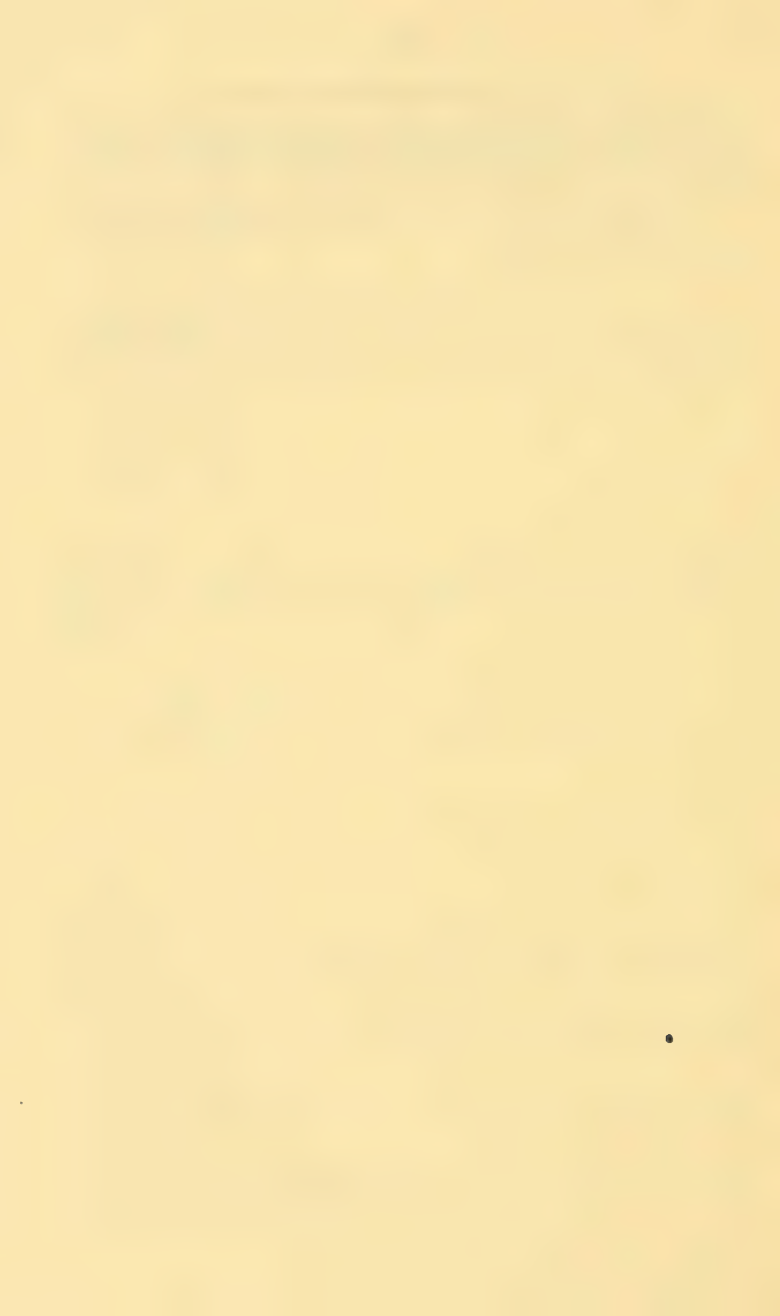
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THE INDUSTRIAL REORGANIZATION ACT (S. 1167)

(The Communications Industry)

TUESDAY, JUNE 25, 1974

U.S. SENATE,
SUBCOMMITTEE ON ANTITRUST AND MONOPOLY
OF THE COMMITTEE ON THE JUDICIARY,
Washington, D.C.

The subcommittee met at 10 a.m. in room EF100, the Capitol, the Honorable Philip A. Hart (chairman of the subcommittee) presiding.

Present: Senators Hart and Hruska.

Staff present: Charles E. Bangert, general counsel; Gerald Hellerman, special financial adviser; Janice Williams, chief clerk; Peter N. Chumbris, minority chief counsel; and Michael Granfield, minority economist.

Senator HART. We will come to order.

I will announce for the peace of mind of everybody that tomorrow we will be meeting in another room.

Our first witness this morning is Mr. Thomas L. Kelly, Jr., and we welcome him.

STATEMENT OF THOMAS L. KELLY, JR., PRESIDENT. TIE/COMMUNICATIONS, INC.

Mr. KELLY. Mr. Chairman, ladies and gentlemen, I would like to take this opportunity to thank the committee for granting me this opportunity to express my views on the condition of competitive services in the communications industry in the United States.

I am Thomas L. Kelly, Jr., and I am president of TIE/Communications, Inc., an independent manufacturer of telephone communications equipment.

I have given a brief background of my communications experience in the prepared statement, and I will just say that after graduation from college I went into the Navy in communications and then worked for the New York Telephone Co.

[Mr. Kelly's prepared statement appears as exhibit 1 at the end of his testimony.]

I was then president of a private telecommunications consulting firm in New York.

In 1968, while working for the firm, the FCC made its historic *Carterfone* decision which declared that the operating telephone com-

panies could not refuse to allow the connection of nontelephone-company equipment to the national telephone networks.

In the ensuing 6 years this decision has led to the development of major innovations in terminal equipment.

In 1969, while at Professional Telephone Consultants, I undertook an additional consultancy working for Allen & Co., an investment house, and was asked to assist a small communications importing firm in which they had invested to market their PABX telephone equipment.

After completing my work with Allen, I became interested in and studied the new market for innovative communications equipment in the United States.

These studies rapidly convinced me that the needs of small to medium size business firms were being largely overlooked by all current manufacturers of telephone equipment.

As a result, after hiring a team of communications design engineers, I founded TIE/Communications in order to create and offer new, innovative products to the business user.

Since 1971 I have been employed as president of TIE/Communications, Inc., an independent nonaffiliated telephone manufacturer.

The philosophy of innovation is a guiding principle of TIE/Communications since its inception, and remains the cornerstone of growth.

From the very first system offered by the company we have offered features unavailable in equipment manufactured by other establishment manufacturers.

Our sales reflect the interest the public had for this type of equipment. In 1971 our sales were approximately \$490,000. They grew in 1972 to over \$4 million. And in 1973 to over \$16 million.

There were three major markets for TIE products at the start of our company in 1971. There still are those today: the Bell operating companies which consisted of about 85 percent of the telecommunications market in the United States; the independent telephone companies, which consist of about 14 percent of the telecommunications market in the United States; and the new interconnect market with about 1 percent of the market.

Taking them in order, the independents were one of our first customers for TIE systems. However, because of the large capital outlays and the mandate for public service, the independents were justifiably conservative in making large-scale purchases.

However, they did install trial systems in the year of our inception in 1971. They have been ordering our equipment in increasing amounts in succeeding years.

We understand that a number of additional orders are coming where they will result in being a significant section of our business.

Our relationships with the Bell System are a little different, however. Curiously enough, TIE's relationship has not been so straightforward with the Bell operating companies.

Wishing to penetrate this market we have sent a number of trial systems to various Bell organizations.

In contrast to the reception given TIE products by the independents, comments from Bell were lukewarm at best, and in many cases

the products were given fleeting appraisals and then not even installed for technical or field trials.

One could legitimately conclude that Bell had found some flaws or defects in TIE products, except for one major contradiction.

The attached report to my testimony, popularly called the Fenton report, was issued by Bell Laboratories in 1972. This evaluation indicates that our product was superior at that time in features and overall performance and recommends modification of the proposed Western Electric products along similar lines.

Contrast this to the New York Telephone statement in my enclosure that claims TIE's systems offer no significant advantages to the company.

In light of this fact, and the Bell operating companies' stated policies to buy the best equipment at the best price, it is a little curious to me.

Earlier this year Bell began a national introduction of a new system called Com Key 718. This bears a surprising resemblance to Fenton's recommendations.

However, in the meantime, TIE has offered a far more advanced, less-expensive system called the Econ-O-Key which added a number of new features.

Thus, with added costs of years of development time and considerable effort the Bell Laboratories' Western Electric Bell operating company combination succeeded in developing a product which was obsolete as it was being trial marketed from a cost as well as performance standpoint, as our comparisons will show.

Yet Bell continues to evaluate but never buy, unlike the more independent relatives.

As you no doubt know, the 1968 Federal Communications Commission landmark *Carterfone* decision paved the way for a new system called "interconnect."

By 1973 some 286,000 lines of communications services had inter-connected across the country.

In a difficult climate the interconnect industry has prospered by dint of hard work, by offering the business customer more features and performances for this hard-earned dollar.

Since TIE equipment has always been in the forefront of features and performance, the interconnect market has been so far the most active for us.

This, I believe, is because all interconnect customers have the freedom to choose the supplier whose products and services best meet their needs, unlike the Bell customers, who lack this option.

But TIE's sales are increasing in both the independent and inter-connect segments of the market.

What therefore is the problem and why am I here?

The problem is that recently A.T. & T., in the person of its chairman of the board, John D. deButts, is concerned. He is concerned, as I quote, about "the degree to which competition should obtain in a field that has been brought to its state of development through the application of common carrier principle."

For this reason he asks "for a moratorium on further experiments in economics, a moratorium sufficient to permit systematic evaluation

—not merely of the questions of whether competition might be feasible in this or that segment of the telecommunications area, but of the more basic question of the long-term impact on the extension" of interconnect.

It is my contention—and, incidentally one which is shared within the telephone operating industry personnel itself, as I will show later—that Mr. deButts is at the very least operating with hidden intentions.

In contrast to his statement, I believe, first, that compelling facts presently exist which provide clear indications of the impact of competition on the industry now; the moratorium's real purpose is to exhaust the resources of any real "competition"; and the moratorium will give Bell enough time to play "catch-up ball."

But why does Mr. deButts feel we need a moratorium?

Let's examine his speech to the regulatory agencies.

One, he says it is a harm to the U.S. telecommunications network which A.T. & T. oversees.

This harm could be due to everything from incompatible design and added technical complexities, to shoddy workmanship, poor installation, poorer services, or a combination of all of the above.

It is also a question, he says, of harm to the consumer; first, because if the national network is harmed, of course, everybody is hurt, including the consumer.

Second, because if competitive equipment sources deprive A.T. & T. of what it claims is a major source of profitable revenue, then the businesses which constitute the major customers for A.T. & T. will require greater resources on the part of A.T. & T., and they will not be able to now finance the residential services that the customers are actually paying for at a subsidized low cost.

Last, that there will be a halt to progress in telecommunications since lost revenues to A.T. & T. and its subsidiaries will slow Western and Bell Laboratories need to compete and innovate.

Let's look at the other side of the truth.

Contrasting with Mr. deButts' claim of harm are the realities of life in the interconnect and independent sectors of the telecommunications industry.

Non-Bell equipment: harmful or helpful?

There is nothing more powerful in the United States than word of mouth advertising. Surely, if a nonestablishment source of telephone equipment had produced any kind of major problems the producers of such equipment would already have been driven out of the business by a groundswell of public complaint, large numbers of lost customers; and as a result they would not be a factor in the business.

Yet the opposite is true. The interconnect field has, in 1973, the fifth year since its formation, had sales of \$150 million; with projections of sales of \$340 million for 1975 according to a source in the Wall Street Journal.

The next point of view is whether the non-Bell equipment is causing harm to the consumer?

If the last argument was a bit confusing this one will seem even more so. In claiming that independent manufacturers like ourselves harm the customer, Mr. deButts flies blindly in the face of logic, and an act of Congress, I might add.

First, if there is no harm to the network, the argument at hand becomes an economic one. Innovations by companies other than A.T. & T., Mr. deButts argues, will cost the consumer more. Let's see why he thinks so.

One argument is that increased competition provided by companies like ourselves make it more expensive, and less profitable, for A.T. & T. to innovate. The truth is almost too ridiculous for words. In a sense, Mr. deButts is absolutely right. Now it does cost more for A.T. & T. to innovate. Simply because, for the first time in years, A.T. & T. must innovate.

If there is no competition there is little pressure to innovate.

Consider the key telephone systems area in which we operate. More properly symbolized, to most businesses, as the six-button telephone. It is used by 85 percent of the small business entities in the United States.

It was first introduced in 1938. Its essential operation and capabilities had remained unchanged until Bell first offered the Com Key telephone system just last year.

The technology for such a system was available years ago—as was the basic design, as in one of our earliest systems. But the competition from independent manufacturers such as us had not become heavy until recently; ergo, no alternative until now.

Independent equipment suppliers are harming the market, says Mr. duButts. Perhaps, then, the harm is in another area.

Let us consider it as a hardship to Bell revenues. Certainly that is where the harm is being felt. In the years since Carterfone, however, Bell's declared dividends have never once dropped, but increased steadily. Their total company profits are up in every year. Last year they had an all-time record of better than 18 percent. If somebody is hurting it definitely is not Bell; now offering a broader range of equipment and services than ever before, and making more money doing it.

The last and perhaps most effective of the arguments used against interconnect—and indirectly, against independent manufacturers such as ourselves—is Mr. deButts' assertion that a competitive market for terminal equipment will ultimately increase the average consumer's cost for residential service.

This argument, which has been expounded at length by various foes of competition, conjures up images of an impoverished senior citizen whose meager income will no longer suffice to permit him to make a telephone call to a doctor in times of emergency.

But the reasoning is as deceptive as it is melodramatic.

In essence, here is how the Bell argument goes.

Business, the largest user of telecommunications, pays the lion's share of the costs to support the national network.

By buying more communications, often at higher rates, as a result they are able to keep the residential subscribers rates down at levels presently enjoyed by the public at large.

Should this source of revenues be diminished by allowing business to own its terminal equipment, or rent it from telephone companies at a lower rate, this subsidy will be eliminated.

Well, this reasoning might bring a tear to everyone's eyes, but it is demonstrably false. Commonsense tells us that business telephone

equipment is more complex than the resident variety. It is used in larger quantities; it is far more complex, requires more maintenance and repair, in other words, greater dollar outlays by Bell for people and material to keep the thing running.

Contrast this with residential equipment which costs less originally, is far simpler, and it becomes inevitable that the position that Mr. deButts expounded does not seem to hold up. How often do you see Bell people making house calls in your home? Contrast this with the armies of telephone personnel who are virtually permanent residents in office buildings and in Government facilities, and the logic of Mr. deButts' argument gets more and more difficult to swallow.

Who really supports whom? That is the question.

Mr. Bernard Strassburg, former chief, Common Carrier Bureau of the FCC, has said he feels there is evidence that the residential and rural service revenues actually subsidize business. Interestingly, this has been validated by a 348-page report by Dittberner Associates prepared for the Government's Office of Telecommunications Policy, which indicates that in truth residential service actually does support business service. Consequently, the report suggests, the threat of interconnection has been grossly overstated. Yet the fact remains that the independent telephone operating companies are being short-changed, but in a slightly less-obvious way.

The main problem is the way that the revenues are doled out among the Bell operating and various independent operating telephone companies who feed their calls through A.T. & T.'s network. It is this procedure of allocating revenues that is called "toll separation," and it creates more hardship than it solves.

I believe that this method of compensation is outmoded and unfair. It automatically gives the most revenue to the largest network involved. And we know which one that is, regardless of the extent the network is involved on a particular call. All in all, the points I have just discussed strongly suggest that serious thought be given to major modifications of the existing rate structure so that the image of the impoverished senior citizen who cannot afford the telephone service does not become a reality at all.

A few decades ago, when the electric utility industry was in its formative years, appliances were primarily manufactured by and available from electric utilities, who considered these activities natural: A bit later Congress passed the Public Utility Holding Act of 1935 which said, in essence, that utilities could not be affiliated with manufacturers of products which used their services. Why did they make this decision? If you were an electric utility desiring to maximize profits would you design an appliance which consumed more or less power?

Would you tend to innovate or introduce new features or amortize the development and manufacturing costs by extending the marketing of the products that you have in the field?

Would you encourage competition from unaffiliated manufacturers or would you stifle that? Would you offer a wide variety of products or a limited range?

The answers are obvious. Obviously Congress didn't like the answers it was getting to these questions at that time; and a marvel-

ous thing happened when it legislated an open market: the consumer profited. One look at the array of appliances on the market, the infinite varieties and models and features and prices and the continual infusion of the latest technologies will tell you the answer. Once the consumer acquires the right to vote with his dollar for products he prefers, almost every such vote is a vote for progress. Free to choose, people will invariable choose dynamics over stasis; and in this case the choice created a multibillion dollar business with all the jobs, tax revenues, and higher standards of living that were the inevitable result.

At this point, unless A.T. & T. is stopped there seems to be some problems. There has been ample progress in interconnect by independent manufacturers such as ourselves, larger ones such as Stromberg Carlson, and I.T. & T. Bell's sole argument in this domain can be that by halting the new competitive products, that it makes it more costly for A.T. & T. to compete by necessitating competition; and it is possible that A.T. & T. might choose not to compete or innovate more slowly.

This argument does not hold water: Bell's new Com-Key, the Denver project for new PABX systems represent active, viable competition by A.T. & T. to produce new products quickly because these responses have been produced faster than ever before, and marketed more aggressively.

One of the main problems related to this competition we are inclined to believe has to do with the problem of disclosure. When A.T. & T. and its operating subsidiaries ask for new rates or new rate increases they are required to disclose certain information about their costs, such as equipment costs, which play an important part in what subscribers pay for the use of Bell equipment; but more about that later.

By this time you have heard a lot about my viewpoints. You may be understandably concerned that I am somewhat biased, because my firm is a competitor of A.T. & T.

However, there are others who have voiced opinions such as mine, that Bell does not always know best. Mr. Paul H. Henson is chairman of United Telecommunications, Inc., the country's second largest independent telephone operating company.

Yet in a speech, Mr. Henson remarked:

I submit, however, that interconnect does not represent the death knell of the telephone industry. Rather, the telephone industry need lose no more of the terminal equipment market than it deserves—or feels it can afford to lose.

I quote again:

The industry is composed of an important group of companies providing vital services, and our combined construction budgets consume a significant portion of the Nation's available investment capital. There is no competition in sight that threatens the continued viability of our basic transmission and switching business or the direction it will take in the years to come. What competition we have is very small. With the traditional American penchant for rooting for the small guy, I doubt we can convince many regulators—or the public—that we, the utilities, need protection.

Another industry source, Mr. Nicholas Johnson, former FCC commissioner, put it more strongly. In a speech before the Digitronics Users Association Conference, he said:

Bell management has been urging policies that don't even serve the company's interest. I mean, I could understand how Bell's pursuit of its own interests would not always serve the public interest. That probability was, after all, the original reason for regulation. * * *

If Western Electric is as competitive as A.T. & T. claims, it would be in the interest of the company and its stockholders to divest Western Electric from its A.T. & T. parent. * * *

If Western's prices are as low as A.T. & T.'s arguments say, the company would find immediate success.

Referring to A.T. & T.'s relationship with non-Western manufacturers, Mr. Johnson said:

If the phone company would only encourage the use of its system by innovative equipment manufacturers, rather than discourage them, it would suddenly find 200 million Americans working for Bell on their own time, rather than working against it. The increase in communications traffic in this country ought to be Bell's principal concern and measure of effectiveness. It would jump enormously, because 200 million people can think of a lot more to do with a communications network for themselves than one corporation can think up for them—particularly if it is not working.

Up to now I have devoted my testimony to an analysis of the problems our industry faces. Because of the enormity and immediacy of these problems, I feel we should consider with urgency a number of possible solutions.

First, the nonlegislative solutions.

Right now it is possible to take a number of positive steps without even the necessity of legislation. Simply by exercising your rights and discharging your obligations you can begin to diminish the communications crisis.

ADVISE AND CONSENT: A DEFENSE OF FREE ENTERPRISE

In the selection of the Federal Communications Commission members, careful consideration, whether or not they actively support free enterprise, should be a paramount question. Their answers to the following lines of questioning should help establish whether or not they will bring this positive approach to telecommunications:

Do they favor competition within the telecommunications industry?

Do they believe in an equitable toll separation and revised rate structure based on actual cost of service rather than an artificially imposed rate structure?

If we ask the right questions—questions such as do you favor the use of nonconsolidated reporting throughout the telecommunications industry, to help regulatory agencies, and permit closer supervision of interstate practices—if we ask the right question and refuse to approve nominees who lack the right answers we will be on the road to real progress.

I also recommend an industry board of advisers. I respectfully suggest that Congress consider assembling its own blue ribbon panel of advisers, paid advisers of impeccable credentials to aid the FCC or the Congress in making telecommunications decisions.

Whatever price we pay for these telecommunications experts will be little enough compared to the harm which their absence may encourage.

Now legislative solutions. In my opinion, however, the most needed changes in our system will not happen without legislation, because of their scope and impact.

The first legislative move, I suggest, will be fought tooth and nail. The facts demand the divestiture of Western Electric from A.T. & T.

It is a move which will be good for A.T. & T., good for Western Electric, good for A.T. & T.'s shareholders, good for the general public, and in fact good for the Nation.

Let me show you why:

With 1972 revenues exceeding \$6.6 billion, Western Electric would rank as one of the top 10 industrial corporations in the United States. The company is equally involved in all areas of telecommunications, from dials and components to giant electronic switching systems, and everything in between.

According to the 1972 A.T. & T. annual report its products average 65 percent of prices of like products that could be purchased from other manufacturers. If this last statement is true Western would have phenomenal advantage in the U.S. telecommunications marketplace. Were Congress to initiate legislation requiring divestiture of Western by A.T. & T. the stockholders would benefit enormously from the returns, which would certainly be very high.

Once separated from A.T. & T., Western would be free to compete with independent telephone manufacturers for independent telephone operating dollars. Moreover, and even more important, Western's products—if they are as advanced as A.T. & T. says they are—could make substantial contributions in the international market for this country's balance of payments. Providing the best products at competitive prices in the worldwide industry, whose function is so vital to every nation of every size could bring enormous amounts of money into this country in a period when we need every edge we can get.

Furthermore, Western Electric equipment sold throughout the world would fulfill a moral obligation as well by providing cheaper, better communications, especially to developing nations. We would help progress faster by speeding the dissemination of information in such necessary areas as health and education.

Ironically, there seems to be only one major obvious drawback to this proposal, the problems created for companies like ourselves, not to mention giants such as I.T. & T., Automatic Electric, et cetera.

Why do I advocate these proposals?

First, I believe that independent manufacturers can hold their own even with a liberated Western Electric. Perhaps Western Electric's much vaunted expertise is somewhat overrated, or perhaps I am overconfident. Either way, free competition will let the people reach their own verdict by voting with their dollars; and I believe that the American public deserves this opportunity to vote.

Second, regardless of the points just mentioned, people would benefit from the divestiture of Western in another way: In the environment of competition Western would have much more incentive to innovate.

Third, an independent Western would finally give regulators and the public the opportunity to see what telephone equipment actually costs the Bell operating company. On the basis of A.T. & T.'s present vertically integrated corporate structure it is difficult to determine these figures, since costs may be dumped into whatever pigeon-hole is most convenient at the time.

Fourth, since Western Electric manufacturers such an immense variety of products it just may be that the company is far more adept in making some types of equipment than others, and it could specialize.

Overall, there is another section in the legislative area that I think needs action. That is in the area of cost accounting by the Bell Systems. I believe Congress should act to require that Bell divulge complete information and the supporting statistics relative to how it arrives at the cost of service underlying its rate base.

This proposed congressional legislation would require that accurate cost of service figures be provided on a nonconsolidated basis to regulators for use in determining fair rates for equipment and services. Properly used in rate determination this data would foster, I believe, a more equitable method of compensating A.T. & T.

Let's consider the alternatives. In light of all that I have said it seems likely that barring congressional action, sooner or later legal proceedings, either antitrust, class action, or otherwise, will ultimately produce the divestiture and the actions that I have asked for.

In the meantime, however, our country could well lose its present lead in the telecommunications industry worldwide.

While it might be uncomfortable to take Bell by the horns; it is an emotional price we must pay by tackling the problem now when it is less expensive than later when it will be more expensive.

I believe that if my recommendations are adopted A.T. & T. and its operating companies, the independent telephone industry, and the new interconnect industry, will expand and prosper together, and the public will be able to vote with their dollar for the equipment and services of their choice.

Thank you.

Senator HART. Thank you very much. That statement was, I think, a very powerful one.

Mr. KELLY. Thank you.

Senator HART. You confess it comes from a selfish point of view as well as a public point of view, but making appropriate allowances for self-interest I still think the case you make is a very appealing one. I should have known, but if I did, I had forgotten, the enormity of your growth over a period of 3 years.

I think you gave a very strong indication of the opportunity that is available.

Mr. KELLY. Well, I feel the people, if given the choice to vote with their dollars, will choose the right path.

Senator HART. Well, I meet myself coming around the corner on that one. It is not very appealing for a politician to get up and say, "I think you are dumb" in public. We never say it like it is. We always succumb to the temptation to say it like we want to hear it. I would modify your claim about the wise vote of the consumer by

saying that if thoroughly informed, fully informed, he votes wisely.

You have got some intriguing questions that you want us to ask nominees to the Federal Communications Commission. You skipped those, but I noted them.

Mr. KELLY. Thank you.

Senator HART. The hangup there is that a nominee responsibly would have to say, "Until I hear the evidence I ought not to commit myself." You love to get a juror who is going to vote to acquit you, if you are a defendant's attorney.

You have very strong ideas about what the Commission's position should be, but in certain of those questions wouldn't it be true that a nominee would be answering the question in advance of the evidence?

Mr. KELLY. The things I am proposing in no way suggest that A.T. & T., its operating subsidiaries, the independent industry, should stop competing in any manner. All I am saying is that the competition should be present. I agree, Mr. Henson's position is correct: That if they decided to offer innovative products, they have nothing to fear from competition.

Senator HART. I buy that. I am talking now to the point of these questions you asked of us to ask of nominees to the Commission. While I would love to have a commission that would wind up in the position your questions imply they should, I am not so sure that a nominee can be expected to give you the answer before he goes on the Commission, and before the Commission takes evidence in some of these tested areas.

Mr. KELLY. I am not saying that he should make any decision before he gets to be a nominee. What I am saying is that on the basic principle of this country, of free enterprise, the nominee should affirm that principle in this field as in any other.

Now he might change it because of practical considerations in a network policy, he might have to alter it; we are considering a lot of factors. Basically he should be asked the question of whether he is for free enterprise; and he should affirm that in this industry as well as in every other industry.

Senator HART. That is an easy one. Everybody is for free enterprise.

Mr. CHUMBRIS. Mr. Kelly, there is a danger with your proposition here that the Senate should ask each nominee to FCC certain questions—if he will actively seek ways to provide competition, best equipment service, et cetera in the telecommunication industry as is presented in these hearings.

I have read all three statements, yours and the two other witnesses who will testify. In those statements you make, in some instances, rather strong assertions against both the Federal as well as the State commissioners who have jurisdiction in this matter.

Let's assume for the sake of argument that you feel that those Commissioners are voting against your philosophy. Let's assume we follow your advice and the Senate says we will not confirm any Commissioner of the Communications Commission, or the States say we will not approve any commissioner on the State commission

unless they believe in your theory, then you have locked those commissioners into a view that pleases you, but it may not please the rest of the country.

It may not please the problems that might face your industry. For example, maybe full competition isn't the best answer in an industry which is partly public utility and partly, as you contended, should be competitive, which is a different situation from the computer business that we may have hearings on later, where it is completely competitive and IBM has to compete against the software, the hardware, and everything else.

Here you have an industry that is a public utility. As part of that public utility, the history, as we have read it and as people have testified to it, shows definitely that they themselves had to develop much of their component parts: whether it is telephones, PBX's, and so forth, they have to develop it.

There wasn't an industry ready to take Western Electric's place. Now you come along and with the *Carterfone* decision you have entered the market. You have done well. You go from \$400,000, to \$4 million, to \$16 million. You increased 10 times in 1 year and another 4 times—which is 40 times you have increased from 1971 to 1973. Evidently you have gotten pretty well into the market. Now to try to say that the Senate in confirming a nominee must follow your views, then you will lock those commissioners into almost as bad a position as you are contending the commissioners are now in, whether at the State level or Federal level.

That is the danger of your suggestion.

Mr. KELLY. Well, first, I have not said anything in my statement critical of any of the commissioners or any of the regulatory agencies at the State level. It might be somebody else.

Senator HART. Well, I raised this point, having noticed it as I deliberated your testimony: We don't want to go off on to what is almost a diversion. I was just reacting to your suggestion as to the kinds of questions to ask, against my own experience and discomfort when I confront a nominee, when any of us do. There is no need of kidding. Virtually everybody in the Senate has ideas of what would be best if he were king. You love to think that every nominee shares your point of view, and you move to lock them in on the question and answer.

Mr. KELLY. I looked at my statement from this viewpoint: Not that we were locking in a policy for the man but that we were locking in a look at the industry, at this industry as I believe in all industries, that the competitive function of our country has kept prices and business moving. I think we can do it in this industry.

Mr. CHUMBRIS. Mr. Chairman, while we are on this point, and the only reason I raised it, I spent a lovely weekend reading three thick volumes. In one of them is the exhibit of Mr. Ronald B. Fox, one of the witnesses to be heard. On page 5810, exhibit number 54, the examiner, Mr. Sheridan, in the Michigan Bell case, pointed out his dilemma. He says:

I might as well make a statement on the record. I don't want the fact that I might rule a little bit loosely, at least from my viewpoint, in regards to allowing this type of testimony in, as an endorsement of me of its validity. As I stated

from the beginning of this case, I had a great deal of difficulty with even the presence of the interconnect people in here as competitors. I have doubt in my mind whether the Commission should even concern itself with my competitive effect of the rate structure presented by the applicant. In other words, I have a lot of doubt that we don't really care what the competitive effect is, at least as serious a question in my mind what, and a serious question whether we should care what the competitive effect is if we find the rates to be reasonable.

In other words, his thought was that is his job to determine reasonableness of the rates.

Mr. KELLY. I agree.

Mr. CHUMBRIS. Quoting again:

Now, as I stated in ruling on the interconnect position for intervention, I said that I was allowing them in this case in order to make a more full and complete record in this case, and I just don't want any of my rulings along this line to possibly lull them to sleep.

If I may comment on that, at least this particular examiner felt that rather than denying them the right to intervene, let them present their case and then determine what impact it should have on his ruling.

So evidently there is probably a very serious question around the country in some State commissions, and maybe even in the Federal Communications Commission, as to what impact competition should have in the regulation phase.

As I understand it the State of Nebraska, through the attorney general, the State of North Carolina through its commission, disagree with the Federal Communications Commission on whether you should be able to interconnect into the public utilities line.

The FCC has ruled on that now, and they have just told North Carolina "we are just going to disregard your decision."

That shows that there is this issue raging.

The State might have a different view from the Federal Government. That is why I raised the point earlier. If you force every man who comes before the Senate for confirmation to say "I am for full competition," then how do you define full competition, how are you going to define it, where do you draw the line, and who should draw a line?

Are you going to make it full competition for certain items, but leave aside the public utilities aspect?

That is the reason I brought up the point about a Commissioner being locked in such a position.

Thank you, Mr. Chairman.

Senator HART. The staff has developed a series of questions, but let me ask a couple more that have occurred to me while you were reading.

I have developed an awareness that strong argument is being made that if we permit you and other independents to take away from the Bell System commercial users, business users, that we will wind up applying a heavier cost to the home user; and I have never heard it described as tears for the widow, as you put it.

It is an argument that bothers me.

In theory, in concept, I think logic suggests every user should bear his fair share.

Just how solid is your opinion that the residential rates would not be adversely affected? On what do you base it?

Mr. KELLY. Well, I base it, as I said, personally on my observation in the industry, and a 368-page report from the Office of Telecommunications Policy, by Dittberner Associates, that basically comes to the same conclusion that I have in my time in the industry.

In reality it is the residents and the resident subscriber that is subsidizing the business terminal market. I am not alone in that position.

I am not saying that my position is absolutely correct, but I would say that there is an awful lot of supporting documentation to the point that it is the reverse: That the residents are really subsidizing the business terminal market, now, right today, not in the future.

Senator HART. If you hadn't told me how many pages that report was I would have immediately ordered it in the record.

[Laughter.]

Senator HART. Let me ask the staff to see if there are appropriate excerpts.

In any event, let us receive it.

[For the report referred to see exhibit 27 at the end of Mr. Kelly's oral testimony.]

Senator HART. Just my last point. Western Electric is owned virtually by A.T. & T.?

Mr. KELLY. Yes.

Senator HART. You urged divestiture as a step, and you remind us that it would be fought tooth and nail if we tried to legislate it.

Of course, you are correct.

You do make the point that if divestiture occurred Western Electric would be one of the 10 largest companies in this country?

Mr. KELLY. Industrial corporations in the United States. On Fortune's list of the top 500 industrial corporations.

Senator HART. And earlier testimony made the point that Western Electric as a corporate policy matter elects not to compete overseas? Am I correct on that?

Mr. KELLY. That's correct, Senator. I personally object to that. I feel that not only from the basis that it would create more jobs but also more income to assist our country's payments. Also I think when you look at the underprivileged and underdeveloped sections of the world, that we have a moral obligation if we have all of this advanced equipment, at very reasonable prices, to offer it to the rest of the world, not only from an economic viewpoint, which I think will be very substantial, but also from a moral viewpoint.

This is the basis on which these countries are going to be able to develop in the future.

I feel that there is a very strong reason that this should be done.

Mr. CHUMBRIS. Mr. Chairman.

On this last point, if the legislation, as you point out, is successful in divesting Western Electric away from A.T. & T. as you suggest, then Western Electric will be an independent company: then under Senator Hart's bill, S. 1167, Western Electric would be forced to split because it would be so big that it, with any two or three other companies, would dominate more than 50 percent of the market.

If Senator Hart's bill doesn't become law then the Justice Depart-

ment or the FTC would probably take a look at Western Electric—if it becomes a nonutility company—just like we have been looking at IBM, and as the courts have in other cases.

You would break Western Electric into a lot of little Western Electrics.

Mr. KELLY. I am saying Congress did pass, in dealing with Comsat, an interim step that probably could be enacted without much controversy; and that was requiring Comsat to take competitive bidding on all equipment that they purchased. I believe there is argument on both sides of this question. I think there are great advantages to this country of having Western as an independent entity for the country as a whole.

Mr. CHUMBRIS. I might point out, your equipment was bought from North Electric, is that right?

Mr. KELLY. No.

Mr. CHUMBRIS. One of the witnesses equipment came from North Electric. The reason I bring that out is that Mr. Hellerman and I, and Mr. O'Leary, in order to be able to understand the type of equipment many manufacturers make, went to about four or five different ones. We went to North Electric, to Northern Electric, to A.T. & T., Western Electric plants, and others that we may have visited separately such as I.T. & T., so we could be able to make comparisons of their products for possible discussion during the course of these hearings. We do that for the purpose of trying to give this subject matter as broad and as objective an understanding as we can.

You are raising very, very serious questions. I am sure that when A.T. & T. has its turn it will have something to say as to the statement you have made and to the statements the two following gentlemen will make as we proceed.

Mr. KELLY. I am sure that they will and I think it is a good thing.

Senator HART. One thing they will tell us, I am sure—and it is one of those self-evident facts that we have all grown up to believe—is that we have the best communications system in the world; even if we do, that doesn't mean legislative changes are not permissible.

How do you rate our communications system with the rest of the world?

Mr. KELLY. First I would say we have one of the best telecommunications networks in the world. I don't think that that is at all surprising if you consider the telecommunications network or industry that we have was built up over a period of 70—some years. You take New York City, for example: the first central office that was going to be taken out service was an office put in in 1903. What they did was move it to another building.

It is cumulative investment and makes this telecommunications industry what it is, and plant what is is; I will say yes, it is the largest and one of the best in the world. However, we have had the largest gross national product to support this. We have put an awful lot of our dollars in this telecommunications network as a country.

I think we should end up with a very substantial telecommunications network.

Also, you must consider that if you look at the larger industrial countries in the world you will see that the advanced ones such as Germany and Japan have a telecommunications network that is similar to our own. But you will find that during the Second World War they were pretty well destroyed; also a goodly portion of their investment—the first 40—some years—was destroyed.

I would say we have the best telecommunications network, or one of them now. I think that the Japanese, the Germans, the Swiss, and the Swedish network, are comparable to ours and in some ways may be even superior.

I believe that we have invested in this network over a period of time with great tranquility, and that it should continue.

Mr. HELLERMAN. We are talking residential rates. I think we ought to put in the record at this time a motion before the Public Utilities Commission of the State of California dated June 19, 1974, submitted by R. G. Fair, staff counsel, which indicates that the New York Public Service Commission's staff report found a 5.2 percent rate of return for basic services and "only a 0.6 percent return for the vertical services."

Mr. Kelly, you mention divestiture of Western Electric as a solution to permitting fair competition. What other alternatives do you have, perhaps as an interim step to achieve an environment for competition in this terminal market?

Mr. KELLY. I think when you look at the terminal equipment market, from the Federal viewpoint, it is hard for the Federal Government to take a position in this. The terminal equipment is used at a State level.

I would suggest something similar to arrangements Congress set up in dealing with Comsat in allowing that, and in requiring that all the public utilities buy their equipment at the best competitive price. I believe that way you would soon find out the best price and the best equipment. That would be an alternative which I think would do a lot for the public.

Mr. HELLERMAN. Much has been said and written about Mr. deButt's speech at the meeting in Seattle. What was your reaction to that speech?

Mr. KELLY. Well, I quoted it a little bit in my testimony. About some of my reactions I would say, though, that I feel that in looking at the profits, in looking at the growth, and in looking at almost everything that A.T. & T. has done, which I say is pretty substantial, I believe it was a little bit of an overreaction to a field that is really fairly insignificant to the general well-being of A.T. & T.

Mr. HELLERMAN. In your statement you indicated that some of the Bell Telephone operating companies expressed an interest in your equipment. Do you think pressure was put on them by A.T. & T., 195 Broadway, not to purchase non-Bell equipment; and do you think that has anything to do with trying to keep costs confused so that regulators might have a problem finding out what the actual cost of equipment really is?

Mr. KELLY. Of course, my opinion—and this is an opinion—I really don't testify in this area very often—I try to stay out of it. I would say that the case so far indicates, with reports of their own

which I have showed you, the Fenton report, that they did not buy my product for 2 or 3 years. It was a better product at a better price; I don't know whether that was for other reasons or whether they just did not want the public to have that equipment. I cannot answer your question other than to state, as I did, that they evaluated the equipment as better, less expensive, but they didn't want to buy it. I don't know why.

Mr. HELLERMAN. Has A.T. & T. attempted to obtain your equipment by getting cross-licensing through Nippon Electric?

Mr. KELLY. Let's explain how my equipment is made.

Originally, all of our equipment was produced for our company. It has all been designed in the United States. Starting in 1970. In 1971, 100 percent of our equipment was manufactured for us by Nitsuko Ltd. in Japan under our designs. In 1972, it was 90 percent. In 1973, it was 65 percent. By the year end, we expect it to be 58 percent. By 1979, we expect all of the manufacturing facilities to be in the United States.

The only reason we started the manufacturing facility there is that you need economy of scale to start a production facility. So, therefore, we had our products manufactured originally in Japan.

We are also beginning to take this product now, ourselves, and open up markets for it in Canada, South America; and we are going to start selling it in Europe.

To get back to your question, which is on cross-licensing, yes, a team of Western patent attorneys did go to our manufacturer and ask them to cross-license the product. They were not in a position to do so because the patents on that equipment are held by TIE.

Mr. HELLERMAN. TIE is your company?

Mr. KELLY. Yes.

Mr. HELLERMAN. When your company started to achieve some success in marketing your equipment, what was Bell's reaction? Did they come out on a crash program, to your knowledge?

Mr. KELLY. Well, I testified in my testimony that, of course, after the Fenton Report, in 1972, they put into practice the features and capabilities of my equipment in the new product they introduced during the latter part of last year and the first part of this year, which is Con-Key. Yes, they have responded quickly, I think. I see nothing the matter with their responding and getting out there and competing. That is what I am basically for.

I do believe, though, I should have the opportunity to sell them equipment as any other manufacturer.

Mr. HELLERMAN. I have A.T. & T. internal memorandums indicating in one case, because the equipment—this is the Com-Key equipment—prices out at about \$300 higher than the initial price objective, BTL has reviewed the design to see what could be done to reduce the price. It goes on to indicate changes that occurred.

Are you familiar with this?

Mr. KELLY. Yes. I have seen it.

[The memo referred to appears as exhibit 2 at the end of Mr. Kelly's testimony.]

Mr. HELLERMAN. Have some of those changes been instituted?

Mr. KELLY. Yes, some of them have.

Mr. HELLERMAN. In your opinion what is the effect of those changes? Did they improve the equipment?

Mr. KELLY. Mostly when you do things to reduce price you decrease the features or the quality of the equipment. I don't believe it hurt anything, but it reduced slightly some of the features in the equipment. I don't think it did it appreciably. It was a reaction to a cost problem that they were confronted with and that they were trying to compete with my pricing.

Mr. CHUMBRIS. In answer to the previous question by Mr. Hellerman, you answered that you would just like to have the opportunity of being able to sell your equipment.

Mr. Hellerman and I did visit some of these officials at A.T. & T., as well as some of the competitors, and I think the record will show that A.T. & T. buys from other manufacturers well over a billion dollars a year in component parts and equipment.

Mr. HELLERMAN. I think the record also should be clear that they buy raw materials—including sand—in that figure.

Mr. CHUMBRIS. Of \$1 billion? They have two figures. One is a billion dollars and the other is \$2½ billion a year. I think the \$2½ billion figure will take in what you added. They actually buy \$1 billion a year in actual parts and components that they either use in manufacturing or buy in toto and then will furnish it to the person who wishes to be served.

Mr. KELLY. I don't doubt the figures. All I am saying is in my experience in dealing with my product, which is limited to several of the Bell operating companies, A.T. & T., and Western, it hasn't been the case. That doesn't necessarily mean it might not be the case.

Mr. CHUMBRIS. The opportunity is there. In other words, there is a billion-dollar market that maybe you or some other manufacturers can get a slice of?

Mr. KELLY. Yes.

Mr. HELLERMAN. To your knowledge is another manufacturer supplying key system equipment to A.T. & T.?

Mr. KELLY. That is a big question.

Mr. HELLERMAN. Narrow it down to the key equipment of the type that you offer?

Mr. KELLY. If you mean a full featured key telephone system such as our equipment, and others manufactured by other companies, I would say the answer is no.

Mr. HELLERMAN. The previous document we put in the record indicates concern with the price of the equipment. I have another A.T. & T. memo, from C. J. Nickelsen to Mr. Schiavoni, discussing the Com-Key and the pricing of it. It is a concern that they are coming out \$200 over your equipment. It has an interesting line in here. "Experience with other systems which have been artificially lowered to meet initial price objectives has not been good."

Have you seen that document?

Mr. KELLY. No.

[The document appears as exhibit 2.]

Mr. HELLERMAN. It is about half-way down the page.

Mr. KELLY. Yes. I think it is a problem for them. I have not really read this document before.

Mr. CHUMBRIS. Mr. Chairman, for the record, as you indicated last week, whatever exhibits Mr. Hellerman will be referring to will be made available to the witnesses who will be coming in next week and toward the end of the month for their observations, for any comment they wish to make.

Mr. HELLERMAN. Mr. Chairman, most of these documents have been provided by A.T. & T.

Senator HART. They will be provided.

Mr. HELLERMAN. I would like to introduce another document from Mr. Nickelsen to Mr. Schiavoni indicating a series of problems and/or suggestions to the Com-Key equipment, and another memo dated October 24, 1973, concerning key service unit, the fact that a 551-BQ service unit for Michigan Bell apparently had experienced a severe fire, and a competitive analysis on the key equipment provided by A.T. & T. indicating that of the total competitive key cases in 1972, the Bell System lost 48 percent of them, and that among the most specific causes of the loss of these cases to A.T. & T. were price, features, ownership, maintenance, and availability.

Mr. CHUMBRIS. Mr. Chairman, may I make another suggestion? Mr. Hellerman has given us about 45 different exhibits. Now these are not included in those exhibits you have given. We would like to have copies.

Mr. HELLERMAN. Yes. We will provide copies.

[For the documents referred to, see exhibits 2-12 at the end of Mr. Kelly's oral testimony.]

Mr. HELLERMAN. Would you, offhand, know the price of your equipment for the 14-line, 19-station system?

Mr. KELLY. I could not give it to you off the top of my head.

Mr. HELLERMAN. That is in connection with a document dated March 22, 1973, indicating a cost for a 12-A system of A.T. & T. of \$5,000 installed.

Mr. Chairman, there are a series of other documents I would like to have submitted in the record. To save time, I will not ask that they be each identified. I would like to show to Mr. Kelley a letter from the State of New Jersey Department of Public Utilities, dated November 9, 1973, and a letter from Fassler & Oestreicher, dated October 1, 1973, and ask Mr. Kelly if he is familiar with those documents?

Mr. KELLY. Yes, I have seen these documents. They are from inter-connect companies in New Jersey and were submitted by their attorney for review of the New Jersey Bell operating tariff requirements which was denied.

[See exhibit 4 for the letters referred to above.]

Mr. HELLERMAN. I would like to read one sentence from the letter from the public service commission:

Further, to properly evaluate the merits of your contentions, such hearings would be practicable only upon the expressed representation that your clients would submit to this board's jurisdiction.

Is it your understanding that the Com-Key equipment is only offered in competitive situations by A.T. & T. operating companies?

Mr. KELLY. There are a lot of things I might have feelings about or anybody might have feelings about, but basically, I am one place

removed. I sell telephone equipment to operating companies and nonoperating companies, with the exception of Bell. I have heard reports to that, but I can't say one way or the other.

Mr. HELLERMAN. I would like to introduce into the record a marketing memorandum from Pacific Telephone dated December 1973, concerning Com-Key 718:

Our sales policy is to minimize product churning. It would be that this equipment would be used to offset competition.

Senator HART. It will be received. With respect to the unidentified documents you offered for the record I would ask the minority and majority staff to view them.

Mr. HELLERMAN. Fine.

One further document I would like to specifically identify. It is a New Jersey Bell Telephone document, subject: "Negotiation Guidelines, Concerning Package Rate Introduction."

The first paragraph, the first sentence, reads:

On the effective date, customers will be billed the new "package rates" for key telephone service, but in fact may not have all the features which are included in a monthly package rate.

Then there is advice:

Recommended negotiation procedure: Negotiators should not initiate discussion of the package rates nor offer to add missing features. Do not stimulate changes.

[For the document referred to, see exhibit 3 at the end of Mr. Kelly's oral testimony.]

Mr. HELLERMAN. In your statement you talk about separations and that they may be as a more rational method of doing this. I will introduce documents into the record indicating there are people at A.T. & T. who feel the same way.

In view of the time, I think I will end my questions here.

Senator HART. Those will also be received. Have the minority counsel view them, please.

Mr. Granfield?

Mr. GRANFIELD. Mr. Kelly, I am still somewhat confused. Maybe that is because I don't understand the guts of the issues here. Could you trace out again why you think it is so very important for A.T. & T. to divest itself of Western Electric in terms of the viability of your telecommunications industry?

Mr. KELLY. I went through with you about five or six reasons why I thought it was a good idea. I will go over them again with you.

I would say first that Western Electric, when divested, would be a company with \$6.6 billion in sales and would be one of the largest corporations in the United States; and that it could offer its equipment, which it says it makes at significantly less cost than other manufacturers in the United States or otherwise, to other telecommunications sources in the United States, thereby assisting the consumer in getting their products at a lower price. That's the first reason.

Second, the reason would be that when separated from A.T. & T., Western would be able to bring in and go into new areas that they are now excluded from. In other words, into new product areas, using the expertise and background that they now say they have available in the wider industry that they would be able to compete in.

Mr. GRANFIELD. For example?

Mr. KELLY. For example, equipment for CATV, which they have. Lots of other areas. Right now they are not allowed to be in them. I feel it would be good if they have all of this less costly equipment to get it out to the American public.

I also believe that were Western on its own and independent it would be able to make significant new innovations of all types, not only in new industries but in the present type equipment that has been held back, I believe, by the telephone operating company itself at this point due to the fact that I don't believe they are as interested, let's say, in new innovative products, when you have out, as an operating company on a set rental, products already in place.

I believe they would innovate and bring more new products to the American public.

The next reason would be that I would feel that an independent Western would be able and would, as almost all other independent industrial corporations, compete in the international world market of telecommunications which is very substantial and could add immensely to the jobs, to the income of the United States as a nation, the people, personally.

Next, I feel it would, by doing this, fulfill some moral obligations that we have to the world also, in addition to economic.

I feel that these would be the main points, although I mentioned others, such as I think the new competition would give the regulatory bodies of the United States, no matter who they be, Federal, State, or local, better handles on what equipment really costs, since it would be done on a competitive bidding situation.

Mr. GRANFIELD. Let's pursue this. If somehow Western Electric is divested from A.T. & T. and becomes a more efficient, innovative firm, isn't this going to hurt your firm?

Mr. KELLY. Well, I mentioned, yes, that it has a substantial chance to hurt my firm. I believe, however, that we are a small firm. I think innovation is one of our keys to success. If Western is divested, I still feel that there is a market for a new, innovative product that we are producing. Yes, we would get much stronger competitors.

Mr. GRANFIELD. Why are you so magnanimous in wanting a stronger competitor?

Mr. KELLY. I am not magnanimous. I believe the logic of the situation will come to the position anyhow. If you are familiar with the recent I.T. & T., G.T. & E. legal development, you will understand it is coming to the position, anyhow.

What I am saying is that if it was done with more dispatch, from a legislative viewpoint, where the people would discuss this, rather than wait for the inevitable through the courts, it would benefit the Nation by having this problem discussed and having it resolved. I feel it would help A.T. & T. and the country generally.

Mr. GRANFIELD. In effect, you state one of the reasons you have been able to innovate and succeed in this industry is because you are facing a lethargic monopolist.

Mr. KELLY. I didn't say that.

Mr. GRANFIELD. You indicated in the beginning you saw gaps in this market and you thought A.T. & T. had strong technical and

economic reasons for so doing. I thought I read that in your statement.

Mr. KELLY. That's right.

Mr. GRANFIELD. I am rather curious as to why you want to spin off Western Electric and in essence, as you yourself admit, at least potentially close off these potentials for your firm.

Mr. KELLY. If it was spun off, as you say, first of all, it would open our business, our products, to 85 percent of the business that we now are unable to offer our products to. That isn't a bad opener.

Second, I believe that—and maybe I am wrong—the competitive environment in the country will prove whether I am right or wrong. I believe that we will survive and that we will—against the strong new spun-off Western Electric—be innovative and continue to bring on new products and new ideas that will be marketable.

I believe that it will eventually resolve itself in the way these problems should resolve themselves, anyway: In the marketplace.

Mr. GRANFIELD. If I read you correctly, then, what you really want, what you would hope by spinning off Western Electric, is that A.T. & T. would then be buying their equipment from a whole variety of potential suppliers?

Mr. KELLY. I believe they would be buying it from us if we were offering the best products. They would be buying from Western, or I.T. & T., or G.T. & E., or anybody else, also.

Yes: I believe that they would be more inclined to do so as an independent entity. I believe, though, Western would do very well.

Mr. GRANFIELD. Why do you think we need new legislation to accomplish this goal?

Mr. KELLY. As I stated, I gave you the five or six reasons why I felt it was a very good idea. I can reiterate them again.

Mr. GRANFIELD. No. You indicated why you think it is a good idea. Why not let the courts handle this problem through the anti-trust statutes?

Mr. KELLY. I think that the telecommunications industry is a great national asset. I believe, as I stated in my testimony, that dragging—as you mentioned I.T. & T., G.T. & E.—through the courts for the next I don't know how many years, is not the real way to look at the problem.

I believe the representatives of the Government should look at the problem and should resolve the problem legislatively rather than waiting for it to go through the courts and get a judicial decision and opinion on it.

Senator HART. That is shared by others.

Mr. KELLY. Whatever way they resolve it, I feel that it should be done by the representatives of the people of the United States.

Mr. GRANFIELD. Is it possible as an alternative that A.T. & T. rather than divest itself of Western Electric, be compelled to accept competitors' bids?

Mr. KELLY. That is the other alternative I offered not enthusiastically, but what was required by Congress of Consat, which was that at least on equipment that they were purchasing, they would go competitive and ask for bids on it.

Mr. GRANFIELD. Is it your opinion that State regulatory agencies could compel A.T. & T. to do this? Could they do it without passing a Federal law?

Mr. KELLY. This is a very hard thing. That brings up a whole question which I didn't cover in my testimony. I felt it hadn't been resolved and was hard for legislative action to be taken.

The State and Federal Government have a board, a joint board, which in my opinion should soon come into action because it makes it very hard for a State regulatory agency to say, "OK, now A.T. & T, you take a look and you make sure you place all your equipment competitively"; A.T. & T. comes back and says they are not under that. That part is under the FCC.

I think it is a very hard question for both the State and the FCC to decide who is regulating what.

Again, I still believe that the marketplace is the best place to regulate it.

Mr. GRANFIELD. Ultimately what you really want is for A.T. & T. to buy their equipment competitively. You think divesting itself of Western Electric is the quickest means to achieve that end. Is that correct?

Mr. KELLY. Among other things.

Mr. GRANFIELD. Your goal is really to get A.T. & T. to buy their equipment competitively, which does not necessarily involve the spinning off of Western Electric? There are other ways this could be achieved?

Mr. KELLY. I gave what I thought was the best solution. I also gave a second solution, which I said isn't so good, but it is still a second solution.

Mr. GRANFIELD. It seems to me your second solution is superior to your first, if your goal is, in fact, to get A.T. & T. to buy their equipment competitively?

Mr. KELLY. That is one goal. I mentioned four or five other goals that I thought not only would get A.T. & T. buying their equipment competitively, which could be done by either of those two goals, but also that there would be some benefits basically for the country of doing it in the first manner I suggested; however, both manners would get the equipment bought competitively and would do a lot for the industry.

Mr. GRANFIELD. Are you prevented from going into these international markets that you state we have a moral commitment to enter?

Mr. KELLY. Am I?

Mr. GRANFIELD. Your firm?

Mr. KELLY. No. We are not prevented; neither is A. T. & T.

Mr. GRANFIELD. Thank you very much.

Senator HART. Mr. Kelly, thank you very much.

[The following was received for the record. Testimony resumes on p. 3288.]

MATERIAL RELATING TO THE TESTIMONY OF THOMAS L. KELLY, JR.

EXHIBIT 1.—*Prepared Statement of Mr. Kelly*

PREPARED STATEMENT OF THOMAS L. KELLY, JR., PRESIDENT,
TIE COMMUNICATIONS, INC.

INTRODUCTION AND PRECIS

I am here because I believe that our country faces a problem as serious as either the energy or political crisis. We face a communications crisis whose direct consequences affect the entire economic viability of our nation.

Some would have you believe that the differences we are discussing here are nothing but an intra-industry squabble. One economic faction versus another. A question of technical judgement. Or maybe simply selfishness. It is none of these. *In both the narrowest and broadest senses, we are dealing with a matter of national survival . . . with far-reaching economic, political and social implications, including:*

Preservation of Free Enterprise.—The continued viability of free enterprise as a national way of life;

Corporate Ambition Above National Interest.—The possibility of an institution (or even a single individual) acting with indifference to the authority of the congress, the courts, and, ultimately, the public itself;

Corporate Goals vs. National Growth.—The possibility that a single corporation could, without restraint, severely limit the economic progress of a nation our size, by restricting one of the most basic functions of business—communications;

An End to U.S. Economic Leadership.—The possibility that defiance by a single business entity could significantly and detrimentally affect such major indicators as the country's gross national product and balance of payments;

Large-Scale Economic Blackmail.—The potential power of a single corporate structure to subject major groups of the American people to *financial blackmail*—actually forcing them to subsidize the status quo while paying a penalty for progress.

Unfortunately, these aren't the projections of some yet-to-come 1984. These problems are here today, in the world of telecommunications. And unless we act to correct them today, we may tomorrow find ourselves paying some costly national dues.

I think it is time for some major changes in telecommunications. Changes designed to benefit *every* sector of our economy, including the shareholders of the company that ostensibly has the most to lose.

I ask you to consider taking a number of steps—several requiring no legislation at all—to streamline the industry: to help it function most effectively for all concerned:

Advise and Consent to Reaffirm Free Enterprise: Recognizing that the principles of competition that made this country great are no less valid in telecommunications than any other industry. Using your power of 'Advise and Consent' to question nominees to the Federal Communications Commission regarding their attitudes towards free competition—and rejecting those who do not *explicitly* favor strong, affirmative action.

Congressional Independence in the Public Interest: Rejecting both vocally and with your vote, the overtures of individuals sympathetic to AT&T's heavy lobbying for anti-competitive legislation and other favors which would severely restrict competition.

Is it not unfortunate that we now find ourselves having to legislate in the defense of free enterprise, which has been an integral part of our way of life since our country's inception?

Antitrust Surgery to Restore Competition: Using the precedent of the 1935 Public Holding Act to divest AT&T of its wholly-owned Western Electric manufacturing facilities, to the benefit of everyone, including AT&T shareholders, customers, the public at large, and ultimately, the nation.

While these may sound like strong remedies, I believe they are consistent with the dimensions of the problems they seek to correct. Especially when we consider the alternatives.

CREDENTIALS

Chairman, Senators, Ladies and Gentlemen, I would like to take this opportunity to thank the committee for granting me this opportunity to express my views on the condition of competitive services in the communications industry in the United States. My name is Thomas L. Kelly, Jr., and I am President of TIE/COMMUNICATIONS, INC. an independent manufacturer of telephone communications equipment.

The following is a brief background of my activities in the communications field. After graduating in 1959 from Lehigh University, I went directly to the United States Navy Officers Candidate School in Newport, Rhode Island. Upon completion of my studies at OCS, I was commissioned an Ensign in the United

States Navy Reserve, and assigned as communications officer to U. S. S. Thomas J. Gary, DE 326, operating out of the Newport, R. I. Naval Base. During the next three years, from January 1960 to February 1963, I held various positions in the communications and electronics field on Gary including Communications Officer, Combat Information Officer, Electronics Material Officer, and finally Operations Department Head. Gary was a specially-equipped radar picket ship which operated on the GUIK barrier with sophisticated electronic communications and radar equipment, which linked it directly to the United States air defense network (NORAD). The ship was also radar raid report ship during the Cuban Missile crisis. During my entire tour aboard Gary, I attended numerous advanced communications and electronics schools run under Navy auspices, providing me the opportunity to broaden my knowledge of sophisticated communications and detection systems, and as a result, enhance our ship's ability to accomplish its mission, which was not only detection, but timely reporting by radio, telegraph and teletype throughout the Atlantic Ocean operating area.

Upon leaving the Navy, after the Cuban Missile Crisis in 1970, I returned to civilian life and was employed by the New York Telephone Company in 1963 as a Sales Representative for communication products. During the next three-and-one-half years, I held a variety of responsible positions in the New York Telephone Company, culminating in the responsibilities of Executive Account Representative of major firms with multi-city operations (e.g., Government Employees Insurance Company, etc.). During my career at New York Telephone, I attended numerous schools on Communications equipment and procedures which gave me a broad background in the general needs of business users, and the offerings Bell Systems made available to meet these needs.

During my three years of employment with New York Telephone, I became firmly convinced that it would be extremely useful for business customers to obtain expert, independent, non-prejudiced advice on their communications needs. Therefore, I left New York Telephone and became President of a private telecommunications consulting firm, Professional Telephone Consultants, Inc., in New York City. During the next five years, 1965 through 1970, I consulted with such major institutional and business clients as the Rockefeller Institute, Hartz Mountain Products, Herman I. Siegal (HIS), E. F. Hutton, and many other prestigious national organizations. My activities in this capacity consisted of revising in-place communications systems as well as planning and in many cases, actually designing, new installations for these organizations' national headquarters, plus many branch plants and offices. Although at this time we could only *recommend* service and systems offered by the operating telephone companies and AT&T, our clients implemented recommendations which saved them many thousands of dollars yearly, while improving their communications efficiency. *Our firm's largest problem was the lack of flexible, innovative systems and services in the areas of voice and data transmissions, specifically in terminal equipment.*

In 1968, the FCC made its historic Carterfone Decision which declared that the operating telephone companies could not refuse to allow the connection of non-telephone-company equipment to the national telephone networks. In the ensuing six years, this decision has lead to the development of major innovations in terminal equipment. In 1969, while at Professional Telephone Consultants, I undertook an additional consultancy working for Allen & Company, an investment house, and was asked to assist a small communications importing firm in which they had invested to market their PABX telephone equipment.

After completing my work with Allen, I became interested in and studied the new market for innovative communications equipment in the United States. These studies rapidly convinced me that the needs of small-to-medium-size business firms were being largely overlooked by all current manufacturers of telephone equipment. As a result, after hiring a team of communications design engineers, I founded TIE/COMMUNICATIONS in order to create and offer new, innovative products to the business user. Since 1971, I have been employed as President of TIE/COMMUNICATIONS INC., an independent, non-affiliated telephone manufacturer.

CORPORATE PROFILE OF TIE/COMMUNICATIONS, INC.

TIE/COMMUNICATIONS, INC. was founded in 1971. Its concept: to make innovative, sophisticated communications systems available to businesses of all

sizes. Prior experience indicated the presence of a large market for small-to-medium sized business communications systems offering greater speed and flexibility than equipment currently available to telephone subscribers. While considerable effort and emphasis had been given by the utilities and other companies to developing and installing more flexible systems for larger businesses (e.g., Centrex, PABX, etc.), and telephone central offices (e.g., ESS), little of the available technology had filtered down to smaller businesses with more modest needs. These "second class citizens" were, for the most part, utilizing so-called "key" systems whose basic principles of operation were developed in the late 1930's . . . and had not changed appreciably since. Spurred by the growing "interconnect" industry (more details later), as well as the interest of a number of *independent* telephone operating companies, TIE sales grew rapidly—

Tie sales (approximate)

1971	-----	\$490,000
1972	-----	4,000,000
1973	-----	16,000,000

REASONS FOR GROWTH

The philosophy of innovation, a guiding principle since inception, was and remains the cornerstone of TIE/COMMUNICATIONS's growth. From the very first system offered by the company, we offered features that were unavailable in equipment manufactured by the telephone 'establishment'—i.e., Western Electric, which serves the Bell System, as well as ITT, Stromberg-Carlson, Automatic Electric and other firms serving independent telephone operating companies (which I'll call 'Independents', hereafter).

For example, our first system, the 1030, offered greater line capacity than comparable sets, a larger number of intercom paths, automatic privacy, automatic pushbutton restoration, voice call announcing and intercom through speakers in each set, multi-line conferencing, music on hold, zone paging and many other 'firsts' either totally unavailable or available only as high-options on competitive sets. As a result, a number of independent telephone companies, such as GT & E in Pennsylvania, ordered trial systems for field evaluation. (Interestingly enough, the system GT & E installed has *not had a single maintenance or repair call* since its installation in 1971—a remarkable and enviable record!). In the interconnect field, sales began and grew quickly, as more and more businessmen opted for the greater capabilities of TIE systems. Today, TIE/COMMUNICATIONS key systems are generally acknowledged as the most advanced in the world. Since its inception, TIE has pioneered more than a dozen new features, such as hands-free call-announcing, intercom and answer-back; direct station selection, multiple busy-line fields; universal night answering, and many more.

RELATIONS WITH INDEPENDENT TELEPHONE OPERATING COMPANIES

As indicated above, Independents were among the first customers for TIE systems. However, because of their large capital outlays and mandate for public service, Independents are justifiably conservative in making large-scale purchases of new systems. However, because of TIE products' superior track record in reliability and maintainability, we received a number of significant orders from this marketplace. And we understand a number of additional orders will shortly be forthcoming, for on both our earlier and more recent systems. As the attached correspondence (1) indicates, Independents tend to ask hard questions . . . but they also give credit where credit is due.

RELATIONS WITH THE BELL SYSTEM

Curiously enough, TIE's relations with the Bell-System Operating Companies have not been so straightforward. Wishing also to penetrate this market, we have sent a number of trial systems to various Bell organizations, as the attached correspondence (2) indicates. In contrast to the reception given TIE products by Independents, comments from Bell were lukewarm, at best. (3) In most cases, products were given fleeting appraisals; then not even installed for technical field trials.

One could legitimately conclude that Bell had found some flaws or defects in TIE products, except for one major contradiction. The attached report, popularly called the "Fenton Report," (17) was issued by Bell Laboratories in 1972, and promptly became industry knowledge. The gist of the report is this: the TIE 1030 [also designated Nitsuko or Nitzuko (sic)] was evaluated and compared to a then-forthcoming Western Electric key-system product, which was later introduced as the COM KEY 718. Bell Laboratories' evaluation indicates that our product is superior in price, features and overall performance, and recommends modification of the proposed Western Electric product along similar lines. Contrast this to the New York Telephone (Bell) statement (3) that claims TIE's system offers no significant advantages. In light of the fact that Bell Operating Companies' stated policy is to buy the best equipment at the best price, this is, at the very least, curious.

BELL'S COM KEY DEBACLE

Early this year, Bell began a national introduction of the COM KEY 718, which bears a surprising resemblance to the Fenton Report's recommendations for competition with the TIE 1030 system. However, in the meantime, TIE had offered a more advance, less-expensive system called ECON-O-KEY[™], which added a number of new features. Thus, with an added cost of years of development time and considerable effort, the Bell Labs/Western Electric/Bell Operating Company combination succeeded in developing and manufacturing a product which was obsolescent as it was being trial-made from a cost, as well as a performance standpoint, as our comparisons (4) show. Yet Bell continues to evaluate, but never buy, unlike their more independent 'relatives.'

BEYOND COM-KEY: ANOTHER DEBACLE IN THE MAKING?

The contrast is even more absurd when we consider the 'competition' between AT&T and ourselves on more sophisticated communications systems. Our TIE-PHONE[®] system, for example, is considered the most advanced of its type in the world. Introduced two years ago, it has been installed by such reputable independent operating companies as Central Telephone & Utilities Corporation, Mid-Continent Telephone Corporation and General Telephone & Telegraph Corporation. Installation, testing and evaluation by these firms have given the TIE-PHONE systems high marks in all meaningful criteria, from system design through installation and operation. Bell, on the other hand, has no system to match the TIE-PHONE in features or versatility. Yet despite this, and despite the praise independent telephone companies have given this product, Bell continues to disregard its existence. After numerous presentations and proposals; after sending a number of systems for test and evaluation, Bell Operating companies have yet to install and test their first TIE-PHONE system. Considering the fact that AT & T's recently-introduced COM KEY system is more than a generation *behind* our ECON-O-KEY[®] system, which, in turn, is less sophisticated than TIE-PHONE, it seems Bell has something in mind other than progress.

RELATIONS WITH THE INTERCONNECT INDUSTRY

As you no doubt know, in 1968, the Federal Communications Commission's landmark "Carterfone" decision paved the way for a whole new industry. Called "interconnect" it permitted the telephone user to own, rent or lease any equipment he desired from sources other than the telephone company. By 1973, some 286,000 lines of communications services had interconnected across the country, with an even greater increase projected for 1974. Though FCC rules permit the telephone company renting the lines to attach an "interconnecting device" between telephone system and telephone company trunks (for protective purposes), and the telephone company often charges high rental fees for these devices (more about that, later), some firms nevertheless project savings as high as \$100,000 (5) over 10 years on bills for equipment rental alone.

In this difficult climate, the interconnect industry has prospered, by dint of hard work. And by offering the business customer more features and performance for his hard-earned dollar. Since TIE equipment has always been in the

fore-front in terms of features and performance, the interconnect market has so far been the most active for us. This is because all interconnect customers have the economic freedom to choose the supplier whose products and services best fit their needs (6)—unlike Bell System customers, who lack this option.

TIE'S MANUFACTURING: AN INDICATOR OF INDUSTRY PROBLEMS

In discussing TIE's background, a word or two is in order regarding how our products are designed, manufactured and supported. One indication of the vitality of an industry is the ready availability of manufacturing facilities and competent production personnel. While all TIE products are designed and engineered in the United States, it was originally impossible to manufacture these products in this country, due to lack of facilities and trained manpower. As a result, TIE's U.S.-engineered product was manufactured on a contract-labor basis by Nitsuko, Ltd. of Japan. Long-respected in the telephone industry as a major manufacturer, Nitsuko helped us produce a product incorporating high quality of workmanship and consistent quality control, at a reasonable price. Since that time, TIE has worked diligently to produce more and more of its products (and/or components) in the U.S. Where in 1971, 100% of TIE's products were made in Japan, this percentage dropped to 90% in 1972; 65% in 1973, and is slated to decrease to 58% by year-end. Our goal, by 1979, is to have all production done in the United States. We are also beginning to market our innovative products in the international markets, such as Canada, South America, and Europe. The result will be increasing numbers of domestic jobs in the manufacture of telephone-industry products.

U.S. TELECOMMUNICATIONS: ENVIRONMENT AND PROBLEMS

AN INTRODUCTION TO THE CONFLICT

To understand the magnitude of the problem we face, it is helpful to explore the numbers and relationships we are dealing with. We are talking about an industry whose gross operating revenues in 1972 were some \$25 billion dollars (7). An industry that spent approximately \$10.6 billion dollars last year on construction alone. A field employing well over a million people in activities ranging from design and manufacture through installation, operation, service and a myriad of other activities.

Of the approximately 132 million telephones in service in 1972, almost 109 million were AT & T's, which is estimated to control 85% of the U.S. telephone business. A.T. & T.'s plea is "we're hurting," while its 1973 net earnings increased to a record \$2.99 billion, (8) or \$5.06 a share, up 18.2% from the previous high of \$2.53 billion, reported just a year before.

Despite this, AT & T, in the person of its Chairman of the Board, John D. deButts, is concerned. Concerned about "the degree to which competition should obtain in a field that has been brought to its current state of development through the application of . . . the common carrier principle . . . that the doctrine of competition for competition's sake puts in jeopardy and could in time destroy" (9). For this reason, he asks "for a moratorium on further experiments in economics—a moratorium sufficient to permit a systematic evaluation—not merely of the questions of whether competition might be feasible in this or that segment of telecommunications, but of the more basic question of the long-term impact of its further extension (sic) on the public at large, the adequacy, dependability and availability of its service and the price it will have to pay for it." (9)

It is my contention—and incidentally one which is shared within the telephone operating industry itself, as I will later show—that Mr. deButts is at the very least, operating with hidden intentions. In contrast to his statements, I believe:

Compelling facts presently exist which provide a clear indication of the impact of competition on the industry:

The moratorium's real purpose is to exhaust the resources of any real "competition": and

The moratorium will give AT & T enough time to play 'catch-up ball' and build up its armaments to demolish any competition which may survive.

Why does Mr. deButts feel we need the moratorium? While his speech (9) enclosed, details the reasons, they may be briefly stated as:

'Harm' to the U.S. National Telephone Network, which AT & T over-
sees. Harm due to everything from incompatible design and added technical complexities to shoddy workmanship, poor installation and poorer service.

'Harm' to the Consumer, which is supposed to happen in a number of ways. First, if the national network is harmed, so is everyone who uses it—through degraded performance. And second, because competitive equipment sources will deprive AT & T of what it claims is a major source of highly profitable revenues—i.e., that businesses which constitute the major customers of alternate (non-AT & T) sources of supply, actually finance residential services, since customers for the latter actually pay less.

Halt to Progress, because if revenues are lost to competition, AT & T and its subsidiaries, Western Electric and Bell Laboratories, will have less of an incentive to innovate. And that to date, they are responsible for the procurement amount of innovation in the telecommunications field.

Another relevant problem is that, as products from other suppliers are introduced into the market, more time will need to be spent on compatibility and problem-solving than on creating better products. As objectives as these views may seem, they simply do not jibe with the facts.

THE OTHER SIDE OF THE TRUTH

Contrasting with Mr. deButts' claims of 'harm' are the realities of life in the interconnect and independent telephone operating companies' sectors of telecommunications. When the facts are examined, they suggest that AT & T's claims are self-serving, rather than self-evident.

NON-BELL EQUIPMENT: HARM OR HELP?

It is said that nothing is more powerful than word-of-mouth advertising. Surely, if 'non-establishment' sources of telephone equipment had produced any kind of major problems, the producers of such equipment would already have been driven out of business by a groundswell of public complaints—and large numbers of lost customers—as a result. Yet exactly the opposite seems to be the case:

In the interconnect field nothing could be further from the truth. In 1973—the fifth year since the FCC Carterfone Decision which created the interconnect industry—sales were some \$150 million. With a projection of \$340 million for 1975, according to a source quoted in the *Wall Street Journal* (5). Since this forecast, several sources have pegged this figure considerably higher. Which is especially surprising when you consider this: in many areas, because of the rates AT&T is permitted to charge, the monthly per-line rental of the required interconnect device (more about that later) is equal to the base charge levied for the individual line itself, so that a customer pays double charges for using non-Bell equipment—before the purchase or lease price of the user's non-Bell system is taken into account (!!!) Therefore, from sheer economics, any business employing interconnect equipment instead of Bell's must have some very solid reasons.

Basically, these reasons are threefold:

First is price. In most interconnect installations, the total monthly charge, including Bell fees for lines and interconnect device, plus purchase or lease price (including financing, which is usually employed) is equal to or less than a comparable Bell monthly equipment usage fee. So despite the fact that Bell asks a royalty for each non-Bell system used (in the form of paying for an interconnect device), many businesses continue to prefer interconnect because no significant price difference results—except in interconnect's favor.

The second reason—and to many businessmen, the most important one—is features, and the performance new innovative equipment produces. Because non-Bell systems offer features which improve business efficiency by orders of magnitude, they generally produce significantly higher productivity-per-employee. Up to half an hour or more of added 'working' time per day can go a long way towards improving a company's profit-and-loss statement. Because these systems speed workflow; eliminate multiple internal calls, and provide

greater rapport with customers, these customers respond to improved service by generating increased sales.

The third reason is service. While Bell's service is excellent in many areas, many customers are nevertheless plagued with phone systems which have significant amounts of down-time, persistent 'bugs' and other ailments.

Contrast this with the norm among interconnect companies. Most interconnect contracts have performance clauses with penalties, so interconnect companies have good, sound financial reasons for rapid service and top-flight maintenance. Beside the letter of the law, there are practical realities: the holder of a lease is not likely to make payments when his communications system is out of order. Whereas Bell and the businessman can battle it out on the basis of whether or not the subscriber will be disconnected, interconnect's ultimate weapon has considerably less 'teeth.' And unlike Bell, interconnect companies must maintain a good reputation to get new business.

But interconnect is not the only area where non-Bell equipment conspicuously shines. Consider the independent telephone operating companies via a pertinent example.

With more than 542,500 stations in 1973, Rochester Telephone Corporation, one of the independents doing business with us, ranks sixth among independent operating companies in the nation—and fifth in terms of operating revenues, with an estimated \$96,000,000 in 1973. When one considers that the first five are multi-city operations, Rochester Telephone's status becomes even more significant.

But Rochester Telephone's operations are even more remarkable than these figures indicate. Because it is a tightly-run ship that provides excellent service to its subscribers with substantially smaller dollar investments. Moreover, it has enjoyed an enviable record of success, despite the fact that it has one of the most liberal policies towards interconnection of any utility in the nation. Perhaps the key lies in the type of thinking evidenced by a recent statement (7) of Mr. J. H. Cline, Rochester's Vice President of Engineering and Construction:

Cardinal Newman once wrote that 'to live is to change, and to be perfect is to change often.' We can never have the temerity to claim we offer perfect telephone service, but we can always try. That should remain our objective, and to achieve it, we cannot simply survive change, we must anticipate and shape it."

In acting out this philosophy, Rochester Telephone has shown an openness towards considering and evaluating terminal equipment from smaller manufacturers, such as ourselves. And the results seem destined to change the balance of power in the terminal equipment business.

When it comes to the interconnect industry, Rochester Telephone seems to offer an open door. Requiring only a simple, inexpensive Network Protective Device (NPD) costing the user a one-time \$50.00 installation charge, instead of elaborate, costly and failure-prone customer interface devices demanded by the Bell System (installation cost \$25.00; rental \$6.50 per month) Rochester has cooperated with interconnect installers. This has made things far easier on the consumers who choose to opt for them. But because it offers so many innovative types of equipment, Rochester Telephone has lost little, if any business to this sector (only 0.34% to date, according to a New York State Public Service Commission Report dated June 3, 1974 (15). Most importantly, that Rochester Telephone permits the use of an NPD alone indicates the company's faith in the viability of interconnect equipment connected to it. And we strongly suspect it is because of the utility's exposure to the products of responsible independent manufacturers, and their opinion regarding the reliability of these manufacturers' products.

Talking a bit closer to home, I can say from personal experience that critical independent telephone company plant and operations engineers, after scrutinizing the performance of our products in the field, have been most generous with their praise. For the speed and ease with which our systems install. And the reliability with which they continue to operate. Coupled with the fact that our equipment offers more features, with easier installation, than competitive Western Electric and Western-Electric-type systems, it is easy to see why AT & T is not too happy to have us as competitors.

These factors considered, AT & T's claim—and Mr. deButts'—that independent manufacturers like ourselves are causing harm to the network, seem a bit far-fetched.

NON-BELL EQUIPMENT: HARM TO THE CONSUMER?

If the last argument was a bit confusing, this one will be even more so. For in claiming that independent manufacturers like ourselves harm the consumer, Mr. deButts flies blindly in the face of logic . . . and an Act of Congress, I might add.

First, if there is no harm to the network, the argument at hand becomes an economic one. Innovations by companies other than AT & T Mr. deButts argues, will cost the consumer more. Let's see why he thinks so.

One argument is that the increased competition provided by companies like ours makes it more expensive—and less profitable—for AT & T to innovate. The truth is almost too ridiculous for words. In a sense, Mr. deButts is absolutely right. Now it does cost more for AT & T to innovate. Simply because, for the first time in years, AT & T must begin to innovate. As a company with a large investment in capital plant, Bell finds it unprofitable to replace outmoded plant equipment before it reaches the end of its long, long working life. Think of how long it's been since your home phone was replaced, if ever, and you see what I mean.

But if there is no competition, there is little pressure to innovate. Consider the key telephone system, more popularly symbolized to most as the six-button telephone that's used in the 85% of all small businesses in the United States. First introduced in 1938, its essential operation and capabilities had remained unchanged until Bell first offered the COM KEY full-featured key telephone system just last year. The technology for such a system was available years ago—as was the basic design (in one of our earlier systems). But the competition from independent manufacturers such as us hadn't become heavy until just recently. Ergo, no alternative, 'til now. (And interestingly enough—we have heard rumors of Bell internal documents instructing field representatives not to offer the COM KEY except to counter an interconnect firm's bid—so that the revenues Bell receives on its long-ago-amortized key systems can continue unabated.)

More proof was furnished the world by AT & T in 1970 . . . in the form of a significant AT & T effort called the Denver Project. In 1970, AT & T formed a task force consisting of AT & T, Western Electric and Operating Company people. Its purpose: to develop and rush to market PABX systems that could compete with the independently manufactured offerings which were turning customers' heads. The result: a crash program that helped Western cut its usual 6-year major-product lead-time in half. To help things get rolling faster, Bell also began experimenting with alternate means of customer payment, such as declining-scale and lease/purchase-type agreements. These types of financing, which had been pioneered by the interconnect industry, gave Bell a better chance to compete with the aggressive interconnect marketers. And represented a major break in the consumer's favor from past Bell traditions.

But independent equipment suppliers like us are harming the market, says Mr. deButts. Perhaps, then, the harm is in another area.

Let us consider hardship caused the Bell-System revenues. Certainly, that is where harm would be felt. In the years since the Carterfone decision, Bell's declared dividend has never once dropped—it has grown! And the most recent dividend (as well as total company profit) is an all-time record! If someone is hurting, it is definitely not Bell, now offering a broader range of equipment and service than ever before.

THE BIG LIE: COMPETITION WILL COST THE AVERAGE CONSUMER

Last and perhaps most effective of the arguments used against interconnect (and indirectly, against independent manufacturers as well) is Mr. deButts' assertion that a competitive market for terminal equipment will ultimately increase the average consumer's cost for residential telephone service. This argument, which has been expounded at length by various foes of competition, conjures up images of impoverished senior citizens whose meager incomes will no longer suffice to provide them with a telephone to call the doctor in times of emergency, or keep in touch with loved ones from day to day. But the reasoning is as deceptive as it is melodramatic. In essence, here is how the Bell argument goes:

Business, the largest user of telecommunications, pays the lion's share of the costs that support the national network. By buying more communications, often at higher rates, business provides the bulk of revenues that keep the industry operating.

As a result, the Bell System is able to keep residential subscriber's rates down, at the levels presently enjoyed by the public at large.

Should this source of revenues be diminished by allowing business to own its terminal equipment, or rent it from the telephone company at a lower rate because of the "predatory" pricing of Bell's competitors, the 'subsidy' business provides for residential services will be greatly eroded, requiring higher monthly equipment rental fees from residential subscribers thus harming the consumer.

While this reasoning may bring a tear to the eye, it is demonstrably false. Common sense tells us that business telephone equipment is more complex than the residential variety. It is used in larger quantities, and far more often. As a result, business telephone equipment requires more maintenance and repair; in other words, greater dollar outlay by Bell for people and material to keep things running. Contrast this with residential equipment, which costs less and is far simpler, and the anomaly becomes more apparent. How often do you see Bell people making house calls? Contrast this with the armies of telephone personnel who are virtually permanent residents in many office buildings, and the logic of deButts' argument gets more and more difficult to swallow. Who really supports whom? Mr. Bernard Strassburg, Former Chief, Common Carrier Bureau of the FCC, has said he feels there is evidence that residential and rural service revenues actually subsidize business. This has been validated by a 368 page report by Dittberner Associates (10), prepared for the government's Office of Telecommunications policy, which indicates that in truth, *residential service actually does support business service*. Consequently, the report suggests, the threat of interconnection has been grossly overstated. Yet the fact remains that independent telephone operating companies are being shortchanged—for a reason only slightly less obvious.

The main problem behind this problem is the way revenues are doled out among Bell and the various independent telephone companies who feed calls into the Bell network. The procedure of allocating revenues, called 'Toll Separation', creates more hardships than it solves. Here's why:

When an individual makes a long-distance ('toll') call, the total revenues for that call are divided up among the various companies whose networks were utilized in completing it. So far, so good.

However, when it comes to the percentages involved for each ('toll separation'), a funny thing happens on the way to the bank: the local companies—and hence the individual making and receiving the calls—are largely deprived of the benefits.

Here's how it works: instead of being based upon how much of a particular network is used, or whose network initiated the transaction, revenue computations are based directly or indirectly upon whose network is bigger. Allocations are based upon the various companies' relative plant investment—the total money they have put into their respective facilities.

In other industries, the salesman often gets a substantial share of the profits. And other firms involved, like manufacturers, their representatives and agents, get paid according to their contributions. But not in telecommunications.

In the telephone industry, it's a matter of "give and take"—but mostly independents and local Bell units give . . . and AT&T takes. "If you sell it in a bigger store—or even if it just passes through your big warehouse to a smaller store, you're entitled to the lion's share of the profits", is the reasoning, it seems. Nice work, if you can get it. And AT&T does.

I believe this method of compensation is outmoded and unfair, since it automatically gives the most revenue to the largest telephone network involved (and we know who that is), regardless of the extent that network is involved on any particular call. I believe toll separation should be based on a more rational measurement: The cost, in time, labor and equipment usage, incurred by the telephone company in rendering the particular services utilized by the subscriber. Naturally, such determination would necessarily include an overhead factor . . . but it would not let the effect of network size falsely influence the size of disbursement of sales dollars from a particular transaction.

Moreover, present toll separation method of revenue distribution tends to produce a kind of conspicuous consumption—since the larger a network gets, the greater its share of toll-separated revenues. This provides a potent incentive to indiscriminate growth—whether or not the growth is justified.

All in all, the points just discussed strongly suggest that serious thought be given to a major modification of the existing rate structure. So that the image of an impoverished senior citizen who cannot afford telephone service does *not* become a reality.

AN IMPORTANT PARALLEL; PERHAPS A PRECEDENT

A few decades ago, when the electric utility industry was in its formative years, appliances were primarily manufactured by and available from electric utilities—who considered these activities natural (and doubtless profitable) adjuncts to their primary business. A bit later, Congress passed the Public Utility Holding Company Act of 1935, which said in essence that utilities could not be affiliated with manufacturers of products which used their services. Why? Why indeed? If you were an electric utility desiring to maximize profits, would you design an appliance to consume more or less power (and dollars)? Would you tend to innovate by introducing new features, or amortize your development and manufacturing costs by extending the marketing of a product beyond its natural cycle? Would you encourage competition from unaffiliated manufacturers, or stifle it? Would you offer a wide variety of products, or a limited range?

Obviously, Congress didn't like the answers it was getting to these questions at the time. And a marvelous thing happened when it legislated an open market: the consumer profited. One look at the plethora of appliances on the market—the infinite varieties of models, features and prices; the continual infusion of the latest technologies; the interminable efforts to bring quality up, and price down—tells the answer. Once the consumer acquires the right to vote with his dollars for products he prefers, almost every such vote is a vote for progress. Free to choose, people almost inevitably choose dynamics over stasis . . . and in this case, the choice created a multi-billion-dollar business, with all the jobs, tax revenues and higher standards of living that are the inevitable result.

Surely, the communications industry is no exception.

It has been argued that there is a difference. That a poor telephone product could inestimably damage the national communications network, creating lasting harm to the nation. But the argument amounts to technical mysticism. Consider: occasionally, inferior appliances have come on the market. When connected to electrical outlets, they, too have caused chaos, damage to themselves, their users, and potential damage to the electrical network to which they are connected.

But stop. As any appliance user knows, there are safeguards. Fuses and circuit breakers to prevent a damaged vacuum cleaner from disabling the community from miles around. When there is a problem, the circuit to which the offending appliance is connected simply blows a fuse. Disconnecting the appliance's circuit from the rest of the power system. At the worst, a few lights go out in your home: sometimes, not even that. Whatever the problem, it's usually corrected in a matter of minutes.

To prevent even this minor inconvenience, as well as to protect the user, the electrical industry supports a helpful organization called Underwriter's Laboratory. Here, knowledgeable technical people test appliances, wiring and the like to determine whether they are safe for use. So that the safety of consumers and the integrity of the national electrical system are not sacrificed in the interest of free enterprise. Or, vice versa. One an appliance or other electrical component is determined safe, it is impartially certified. Manufacturers manufacture them. And buyers buy . . . secure in the knowledge that the products they purchase are safe for use.

Nevertheless, Mr. deButts has blown a fuse of his own about the matter. Is the telephone industry so different? Field experience, notably at independent telephone operating companies like Rochester Telephone, has indicated that a simple, inexpensive electronic "fuse", can adequately protect the national telephone network against problems caused by faulty equipment. Without the costly complexities of subscriber interface devices like Bell's (which, incidentally, often deteriorate terminal equipment performance, as well). Moreover, many

industry authorities have suggested that a certification program, in concept like Underwriter's Laboratories', could even make the "electronic fuse" (the NPD mentioned earlier) superfluous. Contrary to Bell's assertions of "harm to the network", for which there is no concrete support to date.

WILL ALL THIS HALT PROGRESS?

At this point, unless the question is one of threatened 'blackmail' by AT & T, the answer is obviously "no". For there has already been ample evidence of progress. By independent manufacturers, such as ourselves. And larger ones, such as Stromberg-Carlson and ITT. Bell's sole argument in this domain can only be that by making it more costly for AT & T to compete—i.e., by necessitating competition, it is possible AT & T may choose *not* to compete, or may innovate more slowly (or not at all).

The argument simply does not hold water. Bell's COM KEY and Denver-Project PABX systems represent more active, viable competition than the company has ever produced before. Because these responses have been produced faster than ever before, marketed more aggressively than ever before . . . including more competitive ways to pay for them.

If further competition by AT & T becomes non-cost-effective, or more difficult for any reason, I respectfully submit something is drastically wrong in the sovereign state of Bell. For we are talking about the largest single business entity in the world. With 1972 assets totalling some \$60 billion. A company whose research and development establishment, Bell Laboratories, is world-famous. Pioneering work in such areas as the invention of the transistor, maser, laser and literally thousands of other highly-regarded technological achievements. Bell Laboratories, which in 1972, according to an AT & T prospectus (11), expended some \$149 million for basic research and development, plus another \$232 million for specific development and design work related to Bell System—an amount larger than the total operating revenues of all but the two largest independent telephone companies! Accordingly to the same prospectus, Western Electric, AT & T's manufacturing arm, had sales of "approximately \$6,551,153,000, of which about 83% was to the American Company (i.e., AT & T) and its consolidated subsidiaries, and the remainder was principally in connection with business for the United States Government". (10)

Against a combine like this one, it is hard to conceive how in even the remotest sense, independent manufacturers like ourselves and the people who buy and install our equipment for end-users could present even the remotest threat. More likely, they would present a threat to us, particularly if open competition would be the rule. Yet, we'd welcome it!

Perhaps the problem lies elsewhere.

One of the main problems related to this competition, we are inclined to believe, has to do with the problem of disclosure. When AT & T and its operating subsidiaries ask for new rates or rate increases, they are required to disclose certain information about their costs. Such as equipment costs, which play an important part in what subscribers pay for the use of Bell equipment. But more about that later.

THE INDUSTRY PATTERN OF INNOVATION—A REVEALING PROCESS

One more point should be made which may otherwise become lost in all the noise and smoke. Not only has AT & T lack of innovativeness in the past held back all the Bell operating companies which depend upon AT & T's Western Electric for equipment: the problem has held back the independent telephone companies as well.

In the past, AT & T had been something of a demigod. With few exceptions, only "innovations" brought out by Bell were ever offered to the independent telephone companies for purchase. For a very simple reason: the independents, which could not (and cannot) buy from Western Electric, bought from a small number of very large equipment manufacturers whose offering reached them through cross-licensing with AT & T. So aside from the industry's natural conservatism—which is largely a desirable trait because of the awesome responsibility it bears—the natural flow of "new" ideas was from Bell Labs to Western Electric to the rest of the industry.

Few companies were willing, it seems, to invest in designs or approaches utilizing more modern technologies. The user suffered, with no impetus for change. When Northern Electric of Canada introduced its "Contempra" sets, which represented a stylish, if rather technically similar, approach to a new instrument design, their sales boomed. Obviously, there was a market out there anxious for innovation.

Companies like ourselves were stimulated thereby to see if we could not introduce more far-reaching advances. Specifically, systems that utilized more advanced technologies to help businessmen make the most of their most precious commodities—talent and time.

Judging from the response—from the rapid rise of the interconnect market despite the many Bell-imposed sanctions—our premise has been a correct one. But some of the cobwebs are difficult to dislodge.

WHAT THE INDUSTRY THINKS

By this time, you've heard a lot about my viewpoint. You may be understandably concerned that I am necessarily somewhat biased, because my firm is a competitor of AT&T. However, there are others who have voiced an opinion that Bell doesn't always know best.

Mr. Paul H. Henson is chairman of United Telecommunications, Inc. the country's second-largest independent telephone operating company. Until recently, Mr. Henson had been, as he said before the national convention of the United States Independent Telephone Association year, (72)" . . . as adamantly opposed to interconnect as anybody in the telephone business . . . (who) made speeches and wrote articles deploring the fact that customer-owned terminal equipment might harm the network, that responsibility for service would be divided and not clearly assignable, and that revenues lost through serving interconnect customers would have to be recovered from non-interconnect customers."

Yet, later in his speech, Mr. Henson remarked, "I submit, however, that (interconnect) does not represent the death knell of the telephone industry. Rather, the telephone industry need lose no more of the terminal equipment market than it deserves—or feels it can afford to lose. Again, quoting Mr. deButt's Seattle speech, 'Competition means freedom to leave as well as enter a market.'"

Continuing, Mr. Henson affirmed, most eloquently in my opinion, just where this 'communications crisis' is at:

It helps restore one's faith in the American system of competitive enterprise—and to demonstrate the infirmities of the argument that even limited competition in the telephone business is contrary to the public interest. *It also raises the question as to who benefits from delaying the introduction of new products with such flexibility until competitive pressures force the retirement of old product lines. (Underscore mine.)*

The industry is composed of an important group of companies providing vital services, and our combined construction budgets consume a significant portion of the nation's available investment capital. There is no competition in sight that threatens the continued viability of our basic transmission and switching business or the direction it will take in years to come. What competition we have is the equivalent of the diminutive nose of a small camel in a very large tent. With the traditional American penchant for rooting for the little guy, I doubt we can convince many regulators—or the public—that we need protection.

After making a number of remarks related to 'cost-of-service' pricing (more about that later), Mr. Henson then said, "To say that our industry has served the public well by growing up as it has is not to say that the public might not be served better, hereafter, by making some changes. To say that the long-haul network should be operated under unified direction does not say that single ownership of all the facilities which form that network is essential. Indeed, we know it is not, for many segments of that network are today owned by independent companies. (underscore mine) . . . There is an old Scottish proverb to the effect that it is 'better to bend than to break.' I think it applies very well to the situation in which the American telephone industry—and all of those vitally connected with the people it serves—can be found today." I think Mr.

Henson makes the point well. If, despite the fact that AT&T has the most formidable research, development and manufacturing facilities in the industry, it is difficult for them to compete with independent manufacturers, or more profitable to concentrate on central-office and other large-scale plant equipment (on which there is a higher return, incidentally), what harm could a little competition do for the welfare of the nation?

Mr. Nicholas Johnson, (13) former FCC Commissioner, put it more strongly. In a speech before the Digitronics Users Association Conference, he said, "Bell Management has been urging policies that don't even serve the company's interest. I mean, I could understand how Bell's pursuit of its own interests would not always serve the public interest. That probability was, after all, the original reason for regulation. But why would Bell deliberately adopt policies that simultaneously produce (a) higher prices and worse service for the public, and also (b) lower profits for its shareholders?" Among the many points he raised are:

If Western Electric is as competitive as AT&T claims, it would be in the interest of the company and its stockholders to divest Western Electric from its AT&T parent. Because the artificial constraints on the company and who it may sell to mean Western cannot fully participate in today's technology. If Western's prices are as low as AT&T's arguments say, the company would find immediate success.

AT&T spends more time fighting rear-guard actions than promoting new business it could readily obtain. He calls it "... a company that would actually rather fight through the Commission and courts—with considerable vigor, expenditure and occasional success—than switch. Its failure to anticipate even the comparatively modest growth that has come along without cultivation, has cost its shareholders billions of dollars in potential profits forever lost. Of course, it has also caused the public an awful lot of grief, inconvenience, and excess costs."

He continued, "One of the most ironic features of Bell's failures to expand to meet demand is that it is one of the few companies in the world that could have done so at absolutely no risk whatsoever to itself. Bell is authorized its 'rate of return' on its capital necessarily employed in the business. In other words, every time it can plant a dollar bill in the ground with Commission approval (seldom if ever denied) the dollar immediately starts earning 7 to 7½% for the shareholders. Even if the business does not develop to warrant the investment, the shareholders get their return. It's not only a no-risk investment, it's an investment with a guaranteed return."

Speaking of AT&T's relationship with non-Western Electric manufacturers, Mr. Johnson said: "*If the phone company would only encourage the use of its system by innovative equipment manufacturers* (rather than discourage them), it would suddenly find 200 million Americans working for Bell on their own time—rather than working against it. The increase in communications traffic in this country—which ought to be Bell's principal concern and measure of effectiveness—would jump enormously; because 200 million people can think of a lot more to do with a communications network for themselves than one corporation can think up for them—particularly if it's not working."

THE NORTH AMERICAN TELEPHONE ASSOCIATION

In discussing the viewpoint of the industry, I'd be remiss in not mentioning the viewpoint of NATA—spokesman for a number of independent telephone equipment manufacturers and firms involved in the distribution and/or installation of this equipment. NATA's contention has long been that Bell and its corporate parent have given the independents of the industry much less than a fair shake. That a good deal of the progress made in telecommunications during the last few years has come from the pressure developed by the Carterfone decision, and the innovations fostered by independent manufacturers, distributors and installers.

Because of the current atmosphere—that of generally discriminating restrictions on these independents, especially the installers—it is difficult to judge whether the interconnect industry would be more or less viable in an atmosphere of free competition. What is clear is that they deserve the opportunity . . . by virtue of their dedication to the industry, the investment they have made

in terms of time, talent and resources . . . and last, but certainly not least, by virtue of the economic system under which we live, which lets free competition—consumers ultimately voting with their dollars—decide which products and services are best for their particular needs.

Rather than belaboring—and paraphrasing—NATA's viewpoint, may I refer you to copies of their advertisements (14) which state their viewpoint forthrightly and in detail.

OTHER VOICES

Obviously, there has been much said, and there will be more at these hearings, pro and con the arguments of independence within the telecommunications industry. Let me here cite a number of other statements and authorities which can be obtained from their sources, or alternately, through me, if our assistance can be helpful.

List of Documents:

The Telephone Interconnect Industry: A Stamford Research Institute Study. Proceedings before the Regulatory Commission of New York, New Jersey, North Carolina.

Testimony of Dr. Manley Irwin, before this Subcommittee.

Article by Jerry W. Finebrock in *The Nations: Ma Bell: The Money Machine*. Telecommunications Study by Dittberner Associates for the Office of Telecommunications Policy.

U.S. TELECOMMUNICATIONS: SOME SOLUTIONS

Up to now, I have devoted my testimony to an analysis of the problems our industry faces. Because of the enormity and immediacy of these problems, I felt we should consider with urgency a number of possible solutions:

NONLEGISLATIVE SOLUTIONS

Right now, it is possible to take a number of positive steps without even the necessity of legislation. Simply by exercising your rights and discharging your obligations, you can begin to diminish the communications crisis.

Advise and Consent: A Defense for Free Enterprise.—In the selection of Federal Communications Commission members, consider carefully whether or not they actively support free enterprise. Their answers to the following lines of questioning should help establish whether or not they will bring a positive approach to the future of telecommunications in our country:

Do they favor free competition within the telecommunications industry?

Here, anything less than a strong, affirmative response, and an indication that the candidate will actively seek ways to promote competition in providing the best equipment and services for the public, at the best possible rates, is not in the public interest. Casual or passive regulation is a sure road to continued monopoly on all fronts, and the stifling of healthy, innovative trends by eliminating the rewards of such innovation.

Do they believe in the necessity for open, honest exchange of information between the public, the telephone industry and regulatory bodies?

Again, a strong, affirmative response is called for. Much of the confusion in telecommunications today is due to the lack of information available to the public and regulatory bodies alike. By promoting freer exchange of information, telephone utility compensation can be made more equitable, while the public interest is served more efficiently.

Do they believe in equitable toll separation, and revised rate structures, based on actual cost of services, rather than an artificially-imposed rate structure? This is the question that separates the pragmatic from the naive. For the equitability of toll separation will largely determine the economic viability of telecommunications rate structures in the future—and ultimately, the economic viability of the United States as a world telecommunications power. If we fail to maintain—and improve—our status, the implications are grave indeed.

If we ask the right questions, and refuse to approve nominees who lack the right answers, we will be on the road to real progress.

Information as a National Safeguard.—Both directly and through the Federal Communications Commission (as well as other bodies related to telecommunica-

tions), we would do well to find out more about the mathematics that make the bottom line of this business so "difficult" to compute.

Would it not be more practical for example, for the FCC to have in its possession detailed *unconsolidated* statements from Bell's various components, to help in assuring that inequities in revenue-sharing among Bell-system companies does not take place. So that local Bell-system components get revenues justly due them—and independent telephone operating companies do not lose millions of dollars they justly deserve.

Therefore, I suggest that candidates for the post of FCC Commissioner also be asked, "Do you favor the use of non-consolidated reporting throughout the telecommunications industry, to help regulators apportion revenues more equitable, and permit closer supervision of interstate practices?" Anything less than a strong "Yes!" means more of the same doubletalk from Bell, and less value for the public.

An Industry Board of Advisors.—By now, you've concluded that telecommunications is a complex business, with more possibilities for financial sleight-of-hand than most people can catalogue, let alone understand. With this in mind, I respectfully suggest that Congress consider assembling its own blue-ribbon panel of advisors—*paid* advisors of impeccable credentials—to aid the FCC and/or the Congress in making telecommunications decisions. Drawn from prominent individuals with technical and/or financial experience in the industry, they could improve decisionmaking by furnishing reports which delineate the factors affecting specific questions, and even propose the consideration of additional questions. As a practical matter, this group could have a balanced composition of individuals favored by one or more factions within the telephone industry—with the decision of the FCC and/or the vote of Congress being the ultimate deciding factor. Considering that telecommunications is one of our most vital national resources, permeating and affecting every institution in our lives, whatever price we pay for these telecommunications experts will be little enough compared to the harm which their absence may encourage.

LEGISLATIVE SOLUTIONS

In my opinion, however, the most-needed changes in our system will not happen without legislation, because of their scope and impact. Yet, if ignored, these problems will not go away: they will worsen, until they give our national vocal cords a serious case of laryngitis.

The first legislative move will be fought tooth-and-nail: but the facts demand the divestiture of Western Electric from AT&T. It is a move which will be good for AT&T, good for Western Electric, good for AT&T shareholders, good for the general public, and, in fact, good for the nation. Let me show you why:

With 1972 revenues exceeding \$6.6 billion, Western Electric would rank as one of the top-10 industrial corporations in the United States. The company is deeply involved in all areas of telecommunications, from dials and other components to giant electronic switching systems, and everything in between. If it's used by the Bell system (and therefore usable by all independent telephone companies), there's a better than 99% probability that Western Electric makes it. According to the 1972 AT&T annual report, its products "average 65% of the prices of like products from other manufacturers."

If this last statement is true, Western would have a phenomenal advantage in the U.S. telecommunications marketplace. Were Congress to initiate requiring divestiture of Western by AT&T, stockholders would benefit enormously from the returns, which would certainly be high. Were stock in Western to be offered to the public by AT&T, the proceeds could help reduce the cost of debt financing by the parent company. In a market where the prime rate is soaring, this would be good news indeed. Since Western ostensibly operates in a competitive environment now, there would be little if any change in price to Bell for Western products. So the parent company should suffer little adversity. And think of the new markets Western Electric would have to conquer!

Once separated from AT&T, Western would be free to compete with independent telephone manufacturers for the independent (and Bell) operating company dollar. The independent market, which spent some \$1.5 billion on

plant investment last year alone is a lucrative one indeed. Based on the fact that Western Electric has half ownership in Bell Laboratories, easily the largest, most advanced telecommunications research facility in the world (with over 15,000 patents to its credit), it stands to reason that the company's products should be among the most advanced in the field. Therefore, Western should be able to contribute an enormous wealth of technological and economic advances to the country's entire communications system, instead of just a portion.

Moreover, if Western's products are as advanced as AT&T says they are, a Western Electric independent of AT&T could make a substantial contribution to this country's balance of payment. Providing the best products at a competitive price in a worldwide industry, whose function is so vital to every nation of every size, could bring enormous amounts of money into the country. In a period where we need every edge we can get.

Furthermore, Western Electric equipment sold throughout the world would fulfill a moral obligation as well. By providing cheaper, better communications, especially to developing nations, we would help them progress faster by speeding the dissemination of information in such necessary areas as health and education.

Ironically, there seems to be one major—and obvious—drawback to this proposal: the problems created for companies like ourselves . . . not to mention such giants as ITT, Automatic Electric (GT&E), etc. Why, then, do I advocate such a proposal?

First, I believe that independent manufacturers can hold their own with even a "liberated" Western Electric. As anyone can prove to himself by comparing independently manufactured equipment with that produced by the AT&T combine, many of the independents offer more features and more versatile performance than their Western Electric counterparts. I believe that transformation of Western into an independent entity will not erase this lead. Perhaps Western Electric's much-vaunted expertise is somewhat overrated, or perhaps I am overconfident. Either way, free competition will let people reach their own verdict by voting with their dollars. I believe they deserve the opportunity.

Second, regardless of the point just mentioned, people will benefit from divestiture of Western in another way. In the new environment of competition, Western will have much more incentive to innovate. Since Western is under the corporate umbrella of AT&T, it is likely not to innovate as much as telephone subscribers could wish, because too many new products conflict with one of AT&T's major corporate aims—i.e., to provide the longest possible working life on all systems, thus maximizing return. As a separate entity with its own independent goals, it would go a long way towards stimulating the revitalization of U.S. telecommunications. (In other electronics fields, innovation has come along at a staggering rate. In telephony, Bell's introduction of Western's "Trimline" and "Princess" phones was heralded as a major achievement. It's something like comparing the introduction of a brown automobile in the age of the Model T to the invention of the automobile itself. Obviously, the situation could stand some improvement.)

Third, an independent Western Electric will finally give regulators (and the public) *the opportunity to see what telephone equipment actually costs* Bell operating companies. On the basis of AT&T's present, vertically integrated corporate structure, it is difficult to determine these figures, since costs may be "dumped" into whatever pigeonhole is most convenient. For example, if it is advantageous to have equipment cost less, the development costs can be absorbed by Bell Laboratories or, through Bell, AT&T. If higher equipment costs are needed, they can simply do the reverse. In the highly competitive telecommunications business, where million-dollar contracts pivot on price differences measured in *cents*, this ability becomes a powerful (and unfair, you will agree) competitive tool. Within the myriad mazes of AT&T's immense corporate structure, hiding a few million dollars would be less than a morning's work.

Fourth, since Western Electric manufactures such an immense variety of products, it just may be that the company is far more adept at making some types of equipment than others. For example, it #1 ESS (Electronic Switching System) has been cited as a landmark in the central-office switching area. Liberating Western from AT&T and bringing competition into play

is bound to make Western more profitable by coaxing it into concentration on products or product lines that are most congruent with its particular talents. For example, it takes a lot more capital, and a lot greater diversity and depth of talent to produce a good central-office switching system than it does to create a better telephone instrument. A much higher degree of sophistication is needed to pioneer the development and manufacture of a new semiconductor device, like a large-scale integrated circuit, than it does to make a better telephone line card. By encouraging Western to operate competitively, we may discover all kinds of new synergistic possibilities between telecommunications and such fields as computers, business equipment, home entertainment products, medical systems, and the like. And the biggest benefactor is likely to be the American people, via an improved GNP and all that goes with it. (This, of course, is another reason why I do not especially fear for the survival of Western Electric competitors who are competently managed and adequately capitalized.)

Fifth is the overall effective the divestiture will have on telephone rates in general. Free of the complexities of accounting for an internal manufacturing operation and therefore liberated from the temptation of artificially lowering equipment tariffs in some areas, to meet increased competition (or raising them in others, where competition is less active). Free of the possibility of generating internal profits at a higher rate than the industry average in the electronics industry (a handy 10-12%, as opposed to 5-6% return on investment for AT & T's consolidated figures), AT & T may well decide that its future rests in the domain of legitimate cost-of-service pricing and toll separation.

NON-CONSOLIDATING THE TRUTH

Legislative action in the area of cost-accounting by the Bell system also deliver broad benefits to the public. Specifically, in the area of cost-of-service. I believe the Congress should act to require Bell to divulge complete information with supporting statistics, relative to how it arrives at the cost of service underlying its rate base. The results, I believe, will convince the public that Bell is 'low-balling' the cost of its subscriber services (i.e., cost of providing equipment, repair, and maintenance), in order to more favorably position Western Electric's products. By keeping its stated "cost of service" low, Bell is able to reduce the price it charges for installing and renting equipment—moneys it makes up through higher charges for toll calls and other services.

The method is simple: to arrive at the cost of service for terminal equipment, Bell totals the cost of service on *all* types of equipment—everything from individual telephone instruments and systems that reside on customers' premises to mammoth central offices to the underground cables which link them—and everything in between. Some equipment—like central offices and cables—requires very little maintenance at all, especially compared with the huge amounts of dollars invested. Others, like business telephone equipment is subject to continuous—and strenuous—usage and requires very significant amounts of work. The cost-of-service factor is therefore higher, especially compared to the total investment, since terminal equipment, such as telephone sets, costs considerably less than central offices. In terms of numbers, the figures work out to 1% of investment (or less) for central-office, cable and other large expenditures. For terminal equipment, the figure can range from 30 to 40%.

Why is this important? When total costs to operate equipment divided by total investment, the "average" cost of service comes to 4% of investment. Which is no problem. Yet.

The problem develops when Bell is allowed to use this "average cost of service" figure in computing the tariffs for its terminal equipment. As you have seen, this figure is unrealistically low, so it also reduces the price equipment is offered at in the same unrealistic manner.

As a result, competitive sources of terminal equipment get a less-than-fair shake. And other user costs, like the per-month cost of telephone service, toll call charges and the like, rise to take up the slack.

COST-OF-SERVICE SERVICE: AN HONEST WAY TO EARN A LIVING

For the above reasons, I propose Congress enact legislation requiring that accurate cost-of-service figures be provided on a non-consolidated basis to regulators for use in determining fair rates for equipment and services. Prop-

erly used in rate determinations, these data will foster, I believe, a more equitable method of compensating utilities.

Moreover, to return to a favorite image used in arguments, disadvantaged individuals and people living on fixed incomes, such as senior citizens, will benefit considerably from this action. Ultimately, it may even be possible to provide these groups with "rent-free" phones, or reduced rates, so that they can have the telephone service they need as a necessity of life, without being bled to death by the bill. Like other utility services, such as electricity and gas, our citizens may ultimately be able to pay only for the services they use, instead of some arbitrary monthly fee.

CONSIDER THE ALTERNATIVES

In light of all this, it seems likely that, barring congressional action, sooner or later a legal proceeding, either antitrust, classaction or otherwise, will ultimately produce divestiture. In the meantime, our country could well lose its present lead in telecommunications technology and practice. While it may be uncomfortable to take the Bell by the horns, isn't the emotional price we pay by tackling the problem now a lot less expensive than the tangible one we will surely pay if we do not?

LEGAL SOLUTIONS

If the matter of industry regulation becomes a court case, instead of a case for reasonable discussion, I believe the country will be the poorer for it. Because the time and momentum lost in the interim will surely harm our effectiveness as a nation—as surely as communications pervades every aspect of our business and social lives.

To me, divestiture appears inevitable. As inevitable as the decisions which dissected the great industrial hegemonies earlier this century. If this be true, does it pay for everyone concerned to fight a long, protracted battle in the courts? For if we do, regardless of who wins, the American people will be the losers. And one more position of leadership we now enjoy as a nation shall become a thing of the past.

IN CONCLUSION

When an industry, especially an industry as crucial to our nation as telecommunications, becomes stagnant, it is time for significant changes. And I believe the telecommunications industry, because of the efforts of AT&T, has become just such a domain, as evidenced by the following general characteristics;

People clinging to old ways of working, despite their being confronted with new situations;

The failure to define new goals that are meaningful and challenging: what kind of business should it be; what should its role be in industry and in the economy at large?

The lack of "reflective thinking"—the mental activity required to ask searching (and sometimes embarrassing) questions about the adequacy of the current operation;

The growth of institutionalism—the notion that business has an existence of its own apart from the people who comprise it (as well as those it serves);

The reputation for being a secure and stable institution, but not a venture-some one—more occupied with maintaining than developing—appearing to have arrived at a destination rather than moving towards one;

And last, one that is most powerful in its influence: low tolerance for criticism.

These characteristics are real, and they are damaging, but they are not inevitable . . . if detected when they are relatively small and faint, when the damage has been small, and the chance for reversing the trend is good.

While I agree with these ideas most strongly, they are not my own—they were first advanced by Frederick R. Kappel, former President of American Telephone and Telegraph Company in a lecture series before Columbia University.

As old-fashioned as it sounds, I believe in an honest way of doing business. Because of the system under which our country operates, I believe that whenever and wherever honesty is subjugated to the demands of expediency, a debt is incurred which is inexorably paid. I believe this principle applies both

to individuals and organizations, no matter how large or small, because it is based upon moral, social and economic pragmatism—not merely a noble ideal.

In the past, the spirit of free and open competition ultimately resolved many national and international crises in favor of the American people because we were never afraid of facing the truth. And responding to whatever inadequacies it showed us about ourselves.

Today in telecommunications, as in other areas of national and international scope, we face a crisis which again demands we honestly ask ourselves difficult questions. If we are up to the asking, I know we have the wherewithal to find the answers.

INDEX OF EXHIBITS

(1) Correspondence from Independent Telephone Companies regarding favorable evaluation of TIE/COMMUNICATIONS systems.

(2) Correspondence between TIE/COMMUNICATIONS, INC. and Bell System Operating Companies.

(3) New York Telephone Company (Bell) comments on TIE-PHONE system.

(4) TIE ECON-O-PHONE comparison ads (series of 3).

(5) More Firms Buying Their Own Phone Systems . . ., Sanford L. Jacobs, Wall Street Journal, July 30, 1973.

(6) Letters from interconnect companies regarding TIE products.

(7) Construction Spending Will Total \$12.5 Billion in 1974, a collection of reprints from Telephone Magazine, April 1974.

(8) AT&T 1973 Net Is Up 18.2% to Record, Gene Smith, New York Times, February 5, 1974.

Revenues and Net Income of AT&T Rise to Highs, Gene Smith, New York Times, June 20, 1974.

(9) An Unusual Obligation, Speech to the National Association of Regulatory and Utility Commissioners, John D. deButts, Chairman of the Board, American Telephone and Telegraph Company, September 20, 1973.

(10) Telecommunications Study by Ditterberner Associates for the Office of Telecommunications Policy.

(11) AT&T Prospectus dated March 27, 1973, for 10,000,000 AT&T \$3.64 preferred shares.

(12) Remarks of Paul H. Henson, Chairman of United Telecommunications, Inc., at the National Convention of the United States Independent Telephone Association, October 24, 1973.

(13) Why I am a Conservative, Remarks of Nicholas Johnson delivered to the Digitronics Users Association Conference, October 19, 1970.

(14) Three advertisements by the North American Telephone Association, 1973.

(15) State of New York Public Service Commission Report on Rochester Telephone's Interconnect Offering (Case 26064), dated June 3, 1974.

(16) Pacific Telephone & Telegraph's Oregon market letter and advice on sales of Com Key equipment to present subscribers.

(17) The "Fenton Report"—Bell Laboratories memorandum, dated February 16, 1972.

Exhibit 1

[Memorandum]

ROCHESTER TELEPHONE CO.,
COMMERCIAL DEPARTMENT,
February 8, 1974.

To: NPC members.

From: W. M. Aydelotte.

Subject: Special presentation by TIE on their Econ-O-Key system.

As detailed on the attached memorandum, Bob DeRosa of TIE would like to make a presentation to us on their new Econ-O-Key system.

I have reserved the 4th floor conference room for Wednesday, February 27th commencing at 9:30 A.M. I feel quite strongly that we must quickly make an objective decision on the "full-featured key system market". I have recently

had the privilege of viewing several new key systems—ITT, Stromberg, Vocoder, OKI, Norelco and TIE. It's my opinion that TIE's offering is far and away the best and truly represents state-of-the-art technology while achieving basic aesthetics and economics.

I feel it is imperative that our committee is properly represented at this meeting by qualified technical personnel. Please let me know in advance (by February 20, 1974) who will be present at this demo.

CAROLINA TELEPHONE & TELEGRAPH CO.,
Tarboro, N.C., February 26, 1974.

Mr. ELLIOT TUCKLE,
TIE Communications,
Stanford, Conn.

DEAR MR. TUCKLE: We would like to thank you and your company for providing us with a TIE II Key System for evaluation and thank you also for your visit, demonstration and discussion with us.

We are very impressed with your system's design, features, and operation. We feel that the TIE II offers many good features which would be attractive to a customer.

As the cost of the system is relatively high, compared to other Key Systems and small PABX Systems, the features would need to be emphasized with the customer rather than price.

We hope to sell one system to a customer in the near future. When we do so, this will be the Field Trial for United Telephone System. The results will then be presented to the UTS Standards Committee for evaluation and recommendations as to approval as a system standard.

Please provide us with a supply of sales brochures and any other sales aids that might assist us in this initial sale of the TIE II System.

Thank you again for your assistance and co-operation. Please contact Tom Morrow (919/823-9494) concerning this matter.

Very truly yours,

W. T. JONES,
General Commercial Manager.

MID-PENN TELEPHONE CORP.,
Meadville, Pa., June 4, 1974.

Mr. ELLIOTT TUCKER,
TIE Communications, Inc.,
Stanford, Conn.

DEAR ELLIOTT: I am enclosing the tear sheets and unsolicited letter that I told you about last week. Our customer is not only completely satisfied but also proud of the TIE installation.

Our installers rate your equipment "tops". They state that it will require very little maintenance and should give many years of very satisfactory service.

Please call again if I can be of any help to you.

Very truly yours,

R. W. HORTON, Commercial Manager.

Enclosure.

GELVIN, JACKSON & STARR, INC.,
Meadville, Pa., May 9, 1974.

Attention: Mr. R. W. Horton.
MID-PENN TELEPHONE CORP.,
Meadville, Pa.

DEAR BILL: I have been meaning to write to you indicating how pleased we are with our new TIE System. Every member of our organization fully appreciates the efficiency of our new phone system. Perhaps the equipment is only surpassed by your employees, particularly Larry Atkins and Paul Palmer who installed the system. We certainly appreciate their co-operation, patience, and enthusiasm. They are not only fine workmen but excellent public relations people for the Mid-Penn Telephone Corp.

Thanks again.

Very truly yours,

JOHN D. SMITH.

Exhibit 2

T.I.E. Inc.,
July 21, 1972.

Mr. V. SMITH,
Western Electric Co.,
Cockeysville, Md.

DEAR MR. SMITH: In response to your request for additional information on our 1030 Custom Key Phone System, I have enclosed copies of our sales brochures and technical sales features. I would also like to take this opportunity to explain the features and sales potential of our 1030 Custom Key Phone System.

The 1030 is a fourteen button telephone, of which twelve buttons are active line keys and two are auxiliary service buttons (Hold and Exclusive Release), giving a capacity of up to twelve circuit combinations of twelve central office trunks or PABX extension lines and 3 thirty station dial intercommunication circuits. Our system has all the features of the Bell System's 1A2 key systems and many other added features such as:

Music on hold; automatic pushbutton restoration; individual voice paging to each station; "all call" paging to all stations; tone ringing to all stations; automatic exclusion to any or all stations; exclusive or privacy release by any station; built-in external paging access; built-in zone paging, external or internal; preset intercom conferencing; and direct connection of trunk lines to Bell's new STC key phone interconnect device.

The new telephone system has a centralized key service unit in which all circuit elements are on reliable plug-in printed circuit boards. This plug-in construction allows for fast and inexpensive installation and repair. Also the phones are amphenol connected allowing the use of standard telephone cable and the re-use of in-place cabling where possible. Incandescent line lamps under the clear push button on the instrument are capable of providing excellent illumination under all lighting conditions.

The primary sales advantages of the TIE 1030 system are complete flexibility, ease of operation, and low maintenance requirements of a key system, while offering privacy, centralized answering, station restriction, dial transfer without operator assistance, station controlled add-on conference of both incoming and outgoing calls, power failure transfer, universal night answering, and Meet-me or predetermined conferencing of a PABX system. In addition, the 1030 system provides individual selective paging and "all-call" paging to every instrument, external zone paging to up to three different groups or areas, and external "all call." The 1030 System, therefore, provides every type of paging or location system your customers could ever need. Another feature of the system is the easy expansion from two to thirty stations with a minimum of added expense and installation labor. All repairs and relocations can be accomplished quickly and inexpensively since all components are on plug-in printed circuit cards or amphenol connected.

To sum up my comments, our new 1030 key phone system provides all the features and flexibility of a key phone system with more features than a 300 series configured PABX, while being easy to install and maintain.

Please call or write me or Jack Quinn if you have any other questions concerning our 1030 system.

Very truly yours,

STEPHEN KUSICK.

Enclosures.

JULY 19, 1971.

Mr. DANIEL E. CLANCY,
Western Electric Co.,
New York, N.Y.

DEAR MR. CLANCY: Since I have been unable to get together with you recently, I thought I would bring you up to date on a new NT 1030 key phone which we are presently marketing. We introduced our new key phone to the telephone industry last month. Our distributors have installed ten of these systems in the first two weeks of June in the Chicago, Albany, New Jersey, and Washington areas. The initial customer reaction to the working systems has been very enthusiastic.

TIE's new NT 1030 twelve button key telephone has a capacity of up to 12 circuit combinations of 12 central office trunks or PABX extension lines and 2 thirty station dial intercommunication circuits. Our system has all the features of the Bell System's 1A2 key systems and many other additional features, such as:

Music on hold; automatic pushbutton restoration; individual voice paging to each station; "all call" paging to all stations; tone ringing to all stations; automatic exclusion to any or all stations; exclusion or privacy release by any station; built-in external paging access; built-in zone paging, external or internal; preset intercom conferencing; and direct connection of trunk lines to Bell's new STC key phone interconnect device.

The new telephone system has a centralized key service unit in which all circuit elements are on reliable plug-in printed circuit boards. This plug-in construction allows for fast and inexpensive installation and repair. Also the phones are amphenol connected allowing the use of standard telephone cable and the re-use of in place cabling when possible. Incandescent line lamps under the clear push buttons on the instrument are capable of providing excellent lamping under all lighting conditions.

Although I have only scratched the surface concerning the capability and features of this new system, I hope the enclosed material will answer some of your questions. I hope this new information will be of some interest to you and that we can have lunch sometime soon in New York.

Very truly yours,

THOMAS L. KELLY, JR.

TIE COMMUNICATIONS, INC.,

June 5, 1974.

Mr. J. L. RANDELL,
Assistant Marketing Supervisor,
Northwestern Bell Telephone Co.
Des Moines, Iowa

DEAR MR. RANDELL: Our Mr. Gilbert Engels has requested that I forward to you the technical information requested in your letter of 5/29/74.

The information is as follows:

1. The Los Angeles, California electrical code.

Although we are not in possession of a California Electrical Code Manual, we have enclosed a copy of the Los Angeles "Regulation for Sale and Testing of Electrical Equipment". Rule I standards section indicates that they test with the same parameters as those used by the Underwriter's Laboratories.

TIE Communications power units were tested and approved by the City of Los Angeles, Department of Building and Safety, Electrical Testing Laboratory, 2319 Dorris Place, Los Angeles, California 90031, under application file number 119102, dated 12/14/73, covering the PS-B supply and number 122213, dated 4/9/74 covering the PS-C supply.

2. Electrical characteristics of the varistor in the telephone handset.

Enclosed are two sets of curves for the VR-60, which is provided in parallel with the handset receiver, showing relationship between applied voltage vs. current, and applied voltage vs. resistance in comparison with a selenium type device.

3. Documentation from the Installation and Service Manual being developed.

Enclosed is a copy of the outline for the TIE-2050 Installation Manual covering identification, installation, connections and operation tests. The document has been given priority with a target completion date of 7/15/74. This will follow the BSP format.

I would like to express our sincere appreciation for the consideration that you and other Northwestern Bell personnel have extended to TIE towards a favorable recommendation of this product.

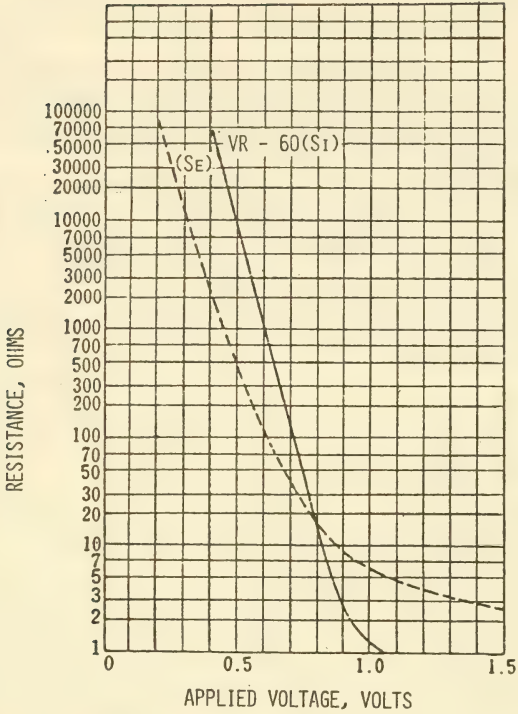
We would like to arrange a meeting at your earliest convenience, in the near future, to discuss further acceptance of the product. In the meantime, if there should be any additional questions, do not hesitate to call.

Very truly yours,

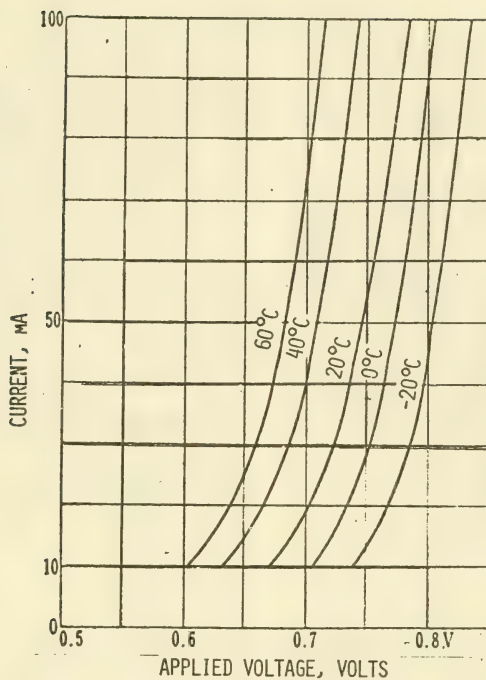
WILBERT C. BROWN,

Director of Research and Development.

Enclosures.



VR-60 TYPE VARISTOR CHARACTERISTICS
VOLTAGE vs RESISTANCE
COMPARED WITH SELENIUM TYPE



VR-60 TYPE VARISTOR CHARACTERISTICS
VOLTAGE vs CURRENT

CITY OF LOS ANGELES
DEPARTMENT OF BUILDING AND FIRE
ELECTRICAL TESTING LABORATORY

REGULATIONS FOR SALE AND TESTING OF ELECTRICAL EQUIPMENT

APPLICABLE PORTIONS OF ORDINANCE NO. 139,419 AND NO. 143,860

Sec. 93.0101. POWER TO REGULATE. The Department is authorized, empowered and directed by Division 3 to enforce all the provisions of Division 4, to adopt standards to which all equipment referred to in Section 93.0402 must conform before its approval, and to make reasonable rules and regulations for governing enforcement. Such rules and regulations, declared by Section 93.0110 to be a part of this Code, shall be reduced to writing and shall be filed in accordance with Section 93.0110 in the office of the Superintendent of Building.

Sec. 93.0402. SALE, INSTALLATION, AND USE. No person shall sell, offer for sale, advertise or display for sale, dispose of by way of gift, loan, rental, lease or premium, or install, or use, any "equipment," as defined in Division 100, until such equipment has been approved by the Department.

EXCEPTIONS: 1. Equipment which is not equivalent to any equipment currently listed by the nationally recognized laboratories approved by the Department, provided all component parts which are equivalent to equipment currently listed by any of the above laboratories are approved, and further provided such equipment and its components comply with all provisions of this Code.

2. Equipment listed by an approved laboratory provided it is installed and used in conformance with this Code.

3. Custom equipment, manufactured for a particular use at a specific address, and complying with all other Code provisions, may be accepted by the Department.

Sec. 93.0403 through 93.0412 repealed.

Section 98.0502. APPLIANCES, FIXTURES AND EQUIPMENT:

(a) Scope. All appliances, fixtures and equipment which are required by the respective Codes to be approved and for which standards are therein cited, or for which standards or specifications have been adopted by the Superintendent, shall be approved by the Department before they may be sold, installed or used.

For the purpose of this section, sale or selling shall refer to any act of selling, offering for sale, displaying or advertising for sale, loaning, renting, leasing, or disposing of by way of gift or premium or otherwise, in connection with the sale or disposal of equipment, fixtures or appliances as designated in this section.

A label or seal of an approved nationally recognized testing agency attached to an item or an identification marking corresponding to a published listing by an approved nationally recognized testing agency, indicating that the item has been tested for compliance with the standards cited in the applicable Code or adopted by the Superintendent, and indicating that the item is included in the testing agency's factory follow-up inspection and listing service, will be accepted in lieu of approval by the Department.

This section shall not apply to general approvals issued pursuant to Section 98.0501 of this Article.

(b) Authority of Superintendent. The Superintendent has the authority to establish standards, specifications and special requirements for materials and methods of construction when standards or specifications are not cited in the Code.

The Superintendent has the authority to establish rules and regulations for the Electrical Testing Laboratory governing requirements for tests, examinations, procedures and approvals, and to establish supplemental fees, including mileage charges for field trips, and charges for examinations and inspections. The rules and regulations shall be in writing and on file in the Department and shall have the same force and effect as if they were included in any of the respective Articles.

(c) Application for Tests and Approvals. Any person submitting any appliance, fixture or equipment for test, examination, approval or renewal of approval, as required by this section, shall file an application therefor with the Department on forms provided by the Department.

A separate application shall be made for each item of appliance, fixture or equipment to be tested or examined, unless otherwise determined by the Department, and shall

bear the signature of the applicant. When necessary, arrangements may be made for all or a part of the tests and examinations to be conducted in the field. Should the testing facilities of the Department be inadequate to determine compliance with the standards, the Superintendent may use available facilities outside the Department, provided the applicant is first notified and the additional cost, if any, is approved by the applicant in writing, for invoicing to and payment by him. The Department may, at its discretion, accept tests and reports of tests by an approved testing agency as a basis in part or in full for granting an approval.

(d) Laboratory Fees. The application for a new approval pursuant to Articles 3, 4 and 5 of Chapter IX of this Code shall be accompanied by a laboratory fee of \$120.00. Thereafter the application for renewal of an approval shall be accompanied by a fee of \$75.00. The fees specified include one hour of laboratory processing time.

A supplemental fee at the rate of \$10.00 per hour shall be due for all time over one hour spent in receiving, set-up, testing, reporting, photographing, clerical and consultation directly related to the application for approval or renewal.

The applicant shall agree in writing, as a part of the application, to pay supplemental fees to cover the cost to the City incurred by the application, including charges for processing time, field travel time and mileage, and special charges which shall be in addition to any application filing fee.

Certain supplemental fees are as follows:

Item	Fee
1. Field travel time and mileage—based on one-way radius distance from laboratory to test site. (Field testing, consultation and standby time directly related to the application is cumulative as processing time specified in this subsection.)	\$15.00 per trip—not more than 15 mile radius. \$25.00 per trip—not more than 30 mile radius. More than 30 mile radius—\$25.00 plus \$0.75 per radius mile beyond 30 miles.
2. Reopening application file closed for failure to submit corrected sample within authorized time limit—not applicable after one year from date of application.	\$20.00
3. Reopening approval file closed for failure to renew within time limit—not applicable after one year from expiration date.	\$20.00
4. Multiple listings—additional models, product or firm names on approved items at time of approval or renewal.	\$10.00
5. Modification of approval—revision of names and/or model numbers under current approval, requiring no testing or examination.	\$20.00

The Department may require a deposit to cover the estimated total supplemental fees to be paid in advance. The total actual cost of the application shall be determined by the Department on the basis of fees established by ordinance and shall be paid by the applicant whether or not an approval is granted. Supplemental fees paid in advance which are in excess of the total actual cost are refundable.

The fee for labels required by Subsection (i) for all electrical equipment approved by the Department shall be four cents for each label.

(e) Test Samples. At the time of filing the application, unless otherwise directed in writing by the Department, the applicant shall submit to the Electrical Testing Laboratory or any testing agency as may be designated by the Department, a representative production sample of the material,

device, appliance or equipment to be tested and examined, unless arrangements have been made for conducting the tests and examinations on a representative production sample in the field. Additional samples shall be made available as may be required.

All wiring diagrams and additional electrical samples, including components, special ingredients, or material required by Subsection (f), shall be made available to the Department and conform to the standards which the electrical equipment must meet before approval can be considered as specified in Subsection (f). If the electrical item submitted for test is determined by the Department to be within the practical range of review by the Electrical Testing Laboratory, it shall be accepted and subjected to the tests required by Subsection (f). Samples shall be removed by the applicant or his authorized agent upon notification to do so by the Department, or they may be scrapped upon written authorization by the applicant. Samples unclaimed six (6) months after such notification shall be scrapped.

The Department is authorized without liability to itself or its authorized representatives, to subject samples to destructive tests as may be required to properly evaluate the tests and examinations.

(f) **Standards.** Equipment requiring approval for use, sale or installation which does not fall within the scope of Code standards or those standards adopted by the Superintendent shall be tested for compliance with applicable portions of these standards. The Superintendent shall determine the specific standards or portions thereof to which any specific equipment must conform.

(g) **Approvals.** Whenever any appliance, fixture or equipment has been found to comply with the provisions of this section and the applicable Code, the Department shall issue an approval therefor for a period of one year. This approval is subject in every case to continued compliance with the provisions of this section and any further amendments to this section and is subject to the requirements of the applicable Article, except where such Articles are in conflict herewith, and subject also in every case to any change in the test or approval requirements for any such material, device, appliance or equipment.

Items submitted for approval which fail to meet the test or examination requirements shall be corrected and resubmitted as set forth in the Electrical Testing Laboratory rules and regulations adopted by the Superintendent before an approval can be granted.

(h) **Renewal of Approvals.** Upon the expiration of an approval granted for any appliance, fixture or equipment, or upon any change in design, material, method of construction or model designation made during the period of approval, it shall be unlawful to sell, offer or advertise for sale, or install the appliance, fixture or equipment until a renewal of approval has been granted under the provisions of this section.

EXCEPTION: Exact duplicates of approved electrical samples, bearing the label required by Subsection (h)

RULES AND REGULATIONS OF THE ELECTRICAL TESTING LABORATORY

RULE I. STANDARDS. The Laboratory shall test equipment under the following standards:

1. The published Standards of Underwriters' Laboratories, Inc., with the provision that wherever the words "National Electrical Code" appear in these Standards the words "Los Angeles Electrical Code" shall be substituted.

2. Standards adopted by the Superintendent of Building.

RULE II. SUPPLEMENTARY FEES. As prescribed by Section 98.0502(d).

RULE III. RE-EXAMINATION. Prior to the expiration date of the approval for the equipment, all of the following shall be submitted:

1. An application.
2. A re-examination fee as prescribed by Section 98.0502(d).
3. A current production sample.

Failure to submit any one of the foregoing prior to the expiration date will result in the file's being closed. The file may be reopened at any time within 1 year thereafter by submittal of a current production sample accompanied by an application and a reopening and a re-examination fee.

RULE IV. CORRECTION. If a fully corrected sample is not submitted for checking and the Laboratory notified of its availability within 30 days after initial corrections have been

and manufactured prior to the expiration of the approval, it may be offered for sale and may be installed as follows: A. Conformance. In this section and Article 3 (Electrical Code).

No equipment, fixtures or appliances manufactured after the expiration of its approval may be placed on sale until it has been examined and approved by the annual re-examination service provided by the rule, and regulations or otherwise approved by laboratories designated by the Superintendent.

(i) **Identification of Approval.** Each item of material and each device, appliance, fixture or equipment approved under the provisions of this section, shall be identified as may be required by the applicable Article or by standards, specifications or rules and regulations under which the approval was granted.

Each item of electrical equipment, fixture or appliance approved under this Article and Article 3 (Electrical Code) shall bear the approval label of the Department, attached in a manner determined by the standards, or otherwise made accessible for inspection without disassembly. Approval labels may be obtained only by the written authorization of the applicant or his authorized representative and shall be available only during the year of approval. The applicant shall be held responsible for their use. No labels shall be affixed to any equipment not currently approved by the Department, nor shall the labels be transferred to the possession of any unauthorized person.

(j) **Inspection.** Every person selling, offering or displaying for sale, renting or installing fixtures, appliances or equipment shall make such items available for inspection upon the request of the Department.

When equipment, fixtures or appliances are found not in accord with the provisions of this section or of the respective Codes, the Department shall give written notice to the person violating these provisions to remove them from sale or use. Any person failing to comply with the provisions of such notices shall be guilty of a misdemeanor and shall be subject to the penalties described in Section 11.00 of the Los Angeles Municipal Code.

Whenever the Superintendent learns or ascertains that any equipment, as defined in this Code, has become hazardous to life, health or property, he shall order in writing, that such equipment be restored to a condition of safety or be dismantled or removed from its present location. The written notice shall fix a time limit for compliance with such order. No person shall use or maintain the defective equipment after receiving such notice.

(k) **Revocation of Approvals.** The Superintendent may suspend or revoke any approval if it is determined that the article which has been approved is dangerous or unsuitable for the purpose intended, or is of a quality of material or workmanship not equivalent to that required by the Code or standards adopted by the Superintendent, or deviates from any of the conditions upon which the approval was granted, or for any of the reasons set forth in this Article.

given in writing, the file shall be closed. An extension of not to exceed 30 days may be granted if a request is received in writing prior to the expiration of the initial 30-day period. After a file has been closed, it may be reopened at any time within 1 year thereafter by submittal of a corrected sample accompanied by an application and an additional reopening fee.

RULE V. PICK UP. In the event that applicant fails to call for or remove the equipment within 15 days after notification the Department may have it crated and shipped to the submitter, collect, by the most convenient carrier. The Laboratory may hold equipment until all fees are paid.

RULE VI. APPROVAL LABELS. Approval labels shall be applied to the equipment at the factory. No labels shall be applied in the field unless the particular piece of equipment has been inspected and approved at that location and fees paid as outlined in Rule II above.

For the purposes of these Rules, "factory" shall mean the place of manufacture, or premises owned or leased by the applicant.

RULE VII. APPLICANT. The applicant shall be a responsible member of the organization which manufactures, imports, distributes or sells the equipment which is to be tested. The application for approval of a specific piece of equipment may be signed by the owner.

**TIE—2050 KEY TELEPHONE SYSTEM—EQUIPMENT DESCRIPTION,
INSTALLATION, CONNECTIONS, OPERATIONAL TESTS**

**TIE PRACTICES, KEY TELEPHONE SYSTEMS MANUAL, PRELIMINARY OUTLINE,
TIE-2050 KEY TELEPHONE SYSTEM**

SECTION 1

Issue 1, April 1974

Equipment Description

1. **INTRODUCTION**
- 1.01 Outlines purpose and scope of section coverage.
2. **STATIONS**
- 2.01 T-216 and T-224 rotary and tone models. Text and Illustration. Describes nomenclature, button configurations, dial options, front panel controls, and general physical characteristics.
- 2.02 Wall-mounting bracket
3. **DSS CONSOLE**
- 3.01 Text and Illustration. Describes nomenclature, physical and functional characteristics.
4. **KSU CABINET CONFIGURATION**
- 4.01 Line Expansion Cabinet. Text and illustration. Describes physical characteristics and electrical interface to basic cabinet.
5. **KSU CARD FUNCTIONS**
- 5.1 Text and table. Text describes purpose and format of data contained in table. Table provides functional description of each KSU card.
6. **KSU MOUNTING BRACKET**
- 6.01 Text and illustration. Describes purpose and physical characteristics of bracket.
7. **POWER SUPPLIES**
- 7.01 Basic Unit PS-B. Text and illustration. Describes physical, electrical, and functional characteristics.
- 7.02 Expansion Unit PS-C. Text and illustrations. Describes physical, electrical, and functional characteristics.

SECTION 2

Common Equipment Installation

1. **INTRODUCTION**
- 1.0 Describes scope of section coverage and organization of information.
2. **GENERAL**
- 2.01 General discussion of approach to installation of key systems.
- 2.02 Descriptive listing of the stages of a typical installation job.
3. **COMMON EQUIPMENT LOCATION**
- 3.01 Environmental considerations (light, heat, humidity, dust, potential flooding).
- 3.02 Accessibility considerations.
- 3.03 Power requirements (separately fused, unswitched 20A outlet).
4. **CABLING SYSTEMS**
- 4.01 Discussion of home run vs. distribution box installation methods.
5. **MDF LAYOUT**
- 5.01 Materials
- 5.02 Description and definitions of TIE KSU connecting block designations.
- 5.03 Recommended MDF connecting block layout schemes
- 5.04 Recommended cable termination, and cross-connecting methods.
6. **MOUNTING**
- MDF
- 6.01 Mounting requirements
- 6.02 Mounting methods
- 6.03 Mounting materials
- 6.04 Mounting procedures
- KSU

- 6.05 Mounting requirements
- 6.06 Mounting methods
- 6.07 Mounting materials
- 6.08 Mounting procedures
- POWER SUPPLIES
- 6.09 Mounting requirements
- 6.10 Mounting methods
- 6.11 Mounting materials
- 6.12 Mounting procedures
- 6.13 Grounding requirements

SECTION 3

KSU Connections

- 1. INTRODUCTION
- 1.01 Outlines purposes and scope of section coverage.
- 2. DESCRIPTION OF KSU CARD LAYOUT
- 2.01 Description, illustrations, and tables on configuring the KSU to meet customer's requirements.
- 3. CO/PBX LINE CIRCUIT WIRING OPTIONS
- 3.01 Text, illustrations strapping drawings and tables showing COU circuit connector strapping for each VCA type.
- 4. COMMON CARD WIRING OPTIONS
- 4.01 Description, illustrations, strapping drawings, and tables describing the options and corresponding strapping on the following KSU common cards and/or card connectors :
 - (a) PGU-A/B
 - (b) MHU-A
 - (c) RGU-F
 - (d) INU-C

SECTION 4

MDF Connections

- 1. INTRODUCTION
- 1.0 Describes content and organization of data in section.
- 2. MDF PRE-WIRING
- 2.01 Text, tables, and illustrations. Covers all permanent interblock wiring that may be done prior to MDF mounting at installation site.
- 3. KSU CABLE CONNECTIONS
- 3.01 Text, tables, and illustrations. Covers connection of cables from KSU to MDF blocks A, B, C, D, E, F and G.
- 4. STATION CABLE CONNECTIONS
- 4.01 Text, tables, and illustrations. Covers termination of station cables at MDF station blocks.
- 5. Text, tables, and illustrations. Covers connection of these two units to their own separate MDF blocks.
- 6. DSS STATION AND DSS CONSOLE CROSS-CONNECTIONS
- 6.01 Text, tables, and illustrations. Describes cross-connections required between DSS blocks and KSU blocks A, B, BA, C, D and F.
- 7. STATION CROSS-CONNECTIONS TO BLOCK
- 7.01 Text, tables, and illustrations. Describes cross-connections required between station blocks and KSU blocks DB, DA, FB, FA.
- 8. CO/PBX (COU) LINE CIRCUIT CONNECTIONS
- 8.01 Text, tables and illustrations. Cover connection of CO/PBX lines to the CO/PBX (COU) line circuit terminals appearing on MDF blocks D, E, F and G. Includes information pertaining to connection of lines terminating directly on the COU and also on lines coupled through various appropriate Voice Connecting Arrangements.

SECTION 5

Station Installation

- 1. INTRODUCTION
- 1.01 Outlines purpose and scope of section coverage.
- 2. LOCATION

DESK INSTALLATION

2.01 Describes requirements for installing station on desk or table.

WALL-MOUNTING

2.02 Text, data, and procedure for mounting station set using wall-mounting bracket.

3. WIRING OPTIONS

3.01 Text and illustration describing functions and showing straps and internal connections for individual station wiring options.

SECTION 6*DSS Position Installation***1. INTRODUCTION**

1.01 Outlines purpose and scope of section coverage

2. LOCATION

2.01 Considerations for desk or wall mounting.

3. DSS STATION STRAPPING CONNECTIONS

3.01 Text and illustrations showing station set strapping for use at DSS position.

4. DSS CONSOLE INSTALLATION

4.01 Description of requirements and procedures for connecting console unit at DSS position.

SECTION 7*Operational Tests***1. INTRODUCTION**

1.01 Description of purpose, format, and use of operational test procedure.

2. OPERATIONAL TESTS

2.01 Step-by-step procedure for powering the system and testing the installed system on a station-by-station basis.

NORTHWESTERN BELL,
Des Moines, Iowa, May 29, 1974.

Mr. GILBERT H. ENGELS,
Executive Vice President, TIE/Communications, Inc.
Stamford, Conn.

DEAR GIL: We are returning the 2050 system you forwarded to us for product evaluation. We appreciate the assistance provided by you and your people during our review.

We would appreciate your assistance in resolving the following questions and concerns prior to releasing our recommendation to our Headquarters location.

1. The Los Angeles, California electrical code.

2. Electrical characteristics of the Varistor in the Telephone Handset.

3. Documentation from the Installation and Service Manual you are developing.

Upon receipt of the above documentation, we believe we can forward a favorable recommendation to our Headquarters for a product trial of the 2050 system.

Yours truly,

J. L. RANDELL,
Assistant Marketing Supervisor.

TIE/COMMUNICATIONS, INC.,
May 17, 1974.

Mr. J. L. RANDELL,
Assistant Marketing Supervisor, Northwestern Bell,
Des Moines, Iowa

DEAR MR. RANDELL: Your concern for a simple installation and trouble shooting manual for the TIE 2050 Key System is well founded.

We here at TIE are presently working on a manual based on the principal of logic. We concur that our technical manual is too technical for the average installer, and a great deal of time could be saved both in installation and trouble shooting situations by having a more simple format to work with. In addition, routine service situations can be handled without costly service equipment being carried on each truck.

The technical writing department advises me such a manual will be available by the end of this summer and possibly sooner.

I have enclosed a copy of a Northern Electric Practices so that you may have some idea of what we hope to accomplish and offer in our manual. Also enclosed is the preliminary data sheet on our SDR-108 Toll Restrictor.

This information should assist you in your continuing evaluation of TIE and its products.

Very truly yours,

GILBERT H. ENGELS,
Executive Vice President.

Attachments: (2) (Omitted).

Exhibit 3

NEW YORK TELEPHONE,
March 21, 1974.

Mr. G. H. ENGELS,
*Vice President Sales, TIE/Communications, Inc.,
Stamford, Conn.*

DEAR MR. ENGELS: As mentioned in your letter of March 7, 1974, evaluation of general trade products for use within New York Telephone is indeed handled through my organization.

We have evaluated the salient economic and feature characteristics of the TIE products mentioned in your letter. This evaluation indicates no economic or significant feature advantage and, in fact, an economic disadvantage to our use of these products. For this reason we did not, nor do we intend to, enter into a technical trial of the particular TIE products you have mentioned.

This decision by no means rules out further consideration of other TIE products. Quite the contrary, we are keenly interested in being made aware of, on a continuing basis, communication products which you market.

Yours truly,

EL ENGBORG, JR.,
(For Assistant Vice President).

TIE/COMMUNICATIONS, INC.,
March 7, 1974.

Mr. C. N. PENNA,
*Assistant Vice President, Technical Services,
New York Telephone Co., New York, N.Y.*

DEAR MR. PENNA: Our company has for some time presented to the New York Telephone Company our TIE Key Telephone products for evaluation and sale. Personnel from our Engineering, Sales, Customer Service, and Applications Engineering Departments have met with your Messrs. Frank, Davis, Pfunk, and many others. In addition, Mr. Bob Coleman of Allen & Company has met with many of your personnel, including Mr. Jack Patterson, since early fall of 1972 concerning the sale of our Key Telephone equipment to New York Telephone Company.

After numerous meetings with these and other personnel from New York Telephone Company, we sent for evaluation during the month of October 1973, our TIE II Key Telephone System and, later, additional ECON-O-PHONE Series 200 telephone instruments. On January 28, 1974 Mr. Robert DeRosa, our Marketing Manager and myself, General Sales Manager, met with Bob Larsen of your marketing department to discuss our TIE II and ECON-O-PHONE series equipment. At that meeting all the various features of our system were presented to Mr. Larsen. I requested a status report of the equipment sent to you on memorandum in October 1973. Mr. Larsen explained that the equipment was still being evaluated and that he had no firm test data, nor any firm date for test trial systems on any of our equipment. In accordance with Mr. Larsen's request, I sent Mr. Larsen an evaluation and comparison of TIE's ECON-O-KEY system with Western Electric's recently introduced COM-KEY 718 system. A copy of my letter is attached.

Since we have been advised that you will handle the final evaluation of our equipment, I wish to point out that we have not to this date received any true evaluation of the equipment. Should there be any additional material which would assist you in your evaluation, we would be happy to comply.

TIE has made an effort during the past year and one-half to provide New

York Telephone Company with any requested materials and information on our Key Telephone Systems, and we hope that in the future we can have more concrete and specific discussions with you with regard to our products.

We look forward to hearing from you shortly.

Thank you for your courtesy and cooperation.

Very truly yours,

GILBERT H. ENGELS,
Vice President Sales.

Enclosure.

TIE/COMMUNICATIONS, INC.,
February 22, 1974.

Mr. ROBERT LARSEN,
Marketing Department, New York Telephone Co.,
New York, N.Y.

DEAR MR. LARSEN: In our last conversation at your office, we discussed TIE's various products which are available to New York Telephone Company. You now have in your engineering department a sample 2050 KSU, TIE-Phone™, and ECON-O-PHONE™ 200 Series for evaluation. If there is any other material or equipment that you would like to assist you and your engineering department in evaluating our equipment, please give me a call personally.

One of the points that we discussed during our meeting with you was our ECON-O-KEY telephone system. In order for you to compare it to Western Electric's recently introduced COM-KEY 718 (7A Communication System), I have enclosed a list (Enclosure I) of some of the major differences between our ECON-O-KEY and Western Electric's COM-KEY™. I have also provided you with a comparison (Enclosure II) of Western Electric's list prices on their 7A Communications System (COM-KEY™) at 10 Stations and 5 Trunks, Rotary; and 15 Stations and 7 Trunks, Touch Tone; with the comparable prices of our ECON-O-KEY System. I think this information will point out very clearly that we have a more flexible, better featured, key telephone system than the COM-KEY™ offered by Western Electric. In addition, our system is expandable as shown up to 14 Central Office Lines and 30 Stations, and is still priced better than the comparable Western Electric COM-KEY™ product.

I hope this material helps you in your analysis of our product, and I hope to hear from you soon.

Very truly yours,

GILBERT H. ENGELS,
Vice President of Sales.

Enclosure: (1)

Enclosure I

TIE ECON-O-KEY 200 COMMUNICATIONS SYSTEM (10 STATIONS AND 5 TRUNK—SYSTEM ROTARY)

Quantity and item description	Item cost ¹	Total Econokey equipment cost	Estimated other equipment	Estimated installed labor	Total estimated installed cost
1—TIE 10S common equipment.....	\$398.40	\$398.40	\$50	\$100	\$548.40
2—ICM.....	19.68	39.36			39.36
5—Line card UN-1 COU.....	27.80	139.00			139.00
1—Transfer key.....				10	10.00
1—Music on hold (MOH includes music source).....	71.48	71.48			71.48
1—MOH connecting arrangement (included above).....					
1—Station busy console watts/DSS.....	192.00	192.00	20	30	242.00
10—Rotary dial station E200AR.....	104.00	1,040.00	250	2,500	1,790.00
10—Auto privacy (included above).....					
10—Privacy release (included above).....					
Total.....		1,880.24	320	640	2,840.24

¹ Approximate prices based on a minimum volume of \$5,000,000 annually.

² Based on an estimated 5 hours installation time per station with a labor rate of \$10 per hour.

WESTERN ELECTRIC LIST PRICES ON THE 7A COMMUNICATIONS SYSTEM (COM-KEY) (15 STATIONS AND 7 TRUNK-SYSTEM TOUCH-TONE)

Quantity, code, and item description	Item cost	Total Com-Key equipment cost	Estimated other equipment	Estimated installed labor	Total estimated installed cost
1—KGE—Key service unit.....	\$585.00	\$585.00	\$50	\$100	\$735.00
1—424A—19 code dial KM.....	67.50	67.50			67.50
1—455A—Tone ringing signal generator.....	38.80	38.80			38.80
1—456A—Voice and tone altering.....	59.50	59.50			59.50
1—460A—2nd ICM path.....	99.10	99.10			99.10
1—KGL—tone receiver.....	210.00	210.00			210.00
7—KGG—Line circuit cards.....	19.50	136.50			136.50
1—KGV—Night transfer key.....	5.05	5.05			5.05
1—KH5 (123A)—Unit (MOH) interconnecting.....					
1—KH6—DSS console.....	86.70	86.70	20		106.70
15—KGI—Touch-Tone TM station.....	75.80	1,132.00	450	¹ 750	2,332.00
15—KGN—Privacy lockout.....	8.55	128.25		75	203.25
15—KGS—Privacy release.....	5.40	81.00		75	156.00
Total.....		2,629.40	520	1,000	4,149.40

¹ Based on an estimated 5 hours installation time per station with a labor rate of \$10 per hour.

TIE ECON-O-KEY 200 COMMUNICATIONS SYSTEM (15 STATIONS AND 7 TRUNK—SYSTEM TOUCH-TONE)

Quantity and item description	Item cost ¹	Total Econokey equipment cost	Estimated other equipment	Estimated installed labor	Total estimated installed cost
1—TIE 10S common equipment.....	\$398.40	\$398.40	\$50	\$100	\$548.40
2—ICM.....	19.68	39.36			39.36
7—Line card UN-1 COU.....	27.80	194.60			194.60
1—Transfer key.....					
1—Music on hold (MOH includes music source).....	71.48	71.48			71.48
1—MOH connecting arrangement (included above).....					
1—Station busy console with DSS.....	192.00	192.00	20		212.00
15—Touch-Tone dial station E200AR.....	120.80	1,812.00	450	² 750	3,012.00
15—Auto privacy (included above).....					
15—Privacy release (included above).....					
1—TTCU (Touch-Tone kit).....	198.40	198.40			198.40
Total.....		2,906.24	520	850	4,276.24

¹ Approximate prices based on a minimum volume of \$5,000,000 annually.

² Based on an estimated 5 hours installation time per station with a labor rate of \$10 per hour.

WESTERN ELECTRIC LIST PRICES ON THE 7A COMMUNICATION SYSTEM (COM-KEY) (10 STATIONS AND 5 TRUNK—SYSTEM ROTARY)

Quantity, code, and item description	Item cost	Total Com-key equipment cost	Estimated other equipment	Estimated installed labor	Total estimated installed cost
1—KGE—Key service unit.....	\$585.00	\$585.00	\$50	\$100	\$735.00
1—424A—19 code dial KM.....	67.50	67.50			67.50
1—455A—Tone ringing signal generator.....	38.80	38.80			38.80
1—456A—Voice and tone altering.....	59.50	59.50			59.50
1—460A—2d ICM path.....	99.10	99.10			99.10
5—KGG—Line circuit cards.....	19.50	97.50			97.50
1—KGV—Night transfer key.....	5.05	5.05		10	15.05
1—KH5 (123A)—Unit (MOH) interconnecting.....					
1—KH6—DSS console.....	86.70	86.70	20	30	136.70
10—KGN—10 button, 7 trunk rotary dial set.....	67.70	677.00	250	¹ 500	1,427.00
10—KGN—Privacy lockout.....	8.55	85.50		50	135.00
10—KGS—Privacy release.....	5.40	54.00		50	104.00
Total.....		1,855.65	320	740	2,915.65

¹ Based on an estimated 5 hours installation time per station with labor rate of \$10 per hour.

TIE COMMUNICATIONS, INC.,
Stamford, Conn.

Date: February 5, 1974.

Subject: Weak points of Bell's Com Key.

As you may be aware Bell has already introduced in a few states (and expects to file tariffs in several others in 1974) a new phone system called Com Key (for COMPETition Key) 718 (for 7 lines—18 Stations).

The standard features include: pick-up, hold and illumination with wink-hold, two path dial intercom, button restoration voice and tone signalling, and multi-line conference (Central Office Lines).

Optional features are: Privacy, privacy release, music on hold, station restriction, power failure transfer, touch tone, pre-set conference (maximum of six stations), busy lamp console/DSS or busy lamp console/message waiting, and night transfer.

1. The 718 is merely a modified version of the standard Bell 10 button key phone. In fact it looks like most 10 button key phones, and is *not* a new phone.

2. Only Com Key 10 button telephone sets can be used on the system.

3. All Com Key sets on the system *must* pick up *all* lines on the system and *all* lines must appear in the *same* sequence on *all* sets (i.e., no private lines).

4. The Com Key 718 can not be expanded beyond the 7 lines and 18 stations without going into Com Key 1434 which is not readily available.

5. All Com Key sets *must* be located on the same premises as the Com Key 718 system, (i.e., no off-premise extensions).

6. The Com Key 718 can not be combined with another Com Key 718 telephone system, or with any other key telephone systems.

7. No wall sets are available for the Com Key 718.

8. Only *one* busy lamp console can be provided with a Com Key 718 system.

9. Either the console with Direct Station Selection or the console with message waiting can be provided in the Com Key 718 system . . . not both.

10. You can not mix rotary and touch tone on the same Com Key 718 system.

11. You can only use a maximum of 7 auxiliary speakers on the Com Key system.

12. The Com Key system has one signalling path which is used for both the internal intercom system, and Direct Station Selection Console.

13. No provision for any internal zone paging.

14. No flashing key.

15. The Com Key 718 system can never be owned, and is still subject to periodic rate increases, Federal Excise Taxes.

The attached sheet should provide you with a further comparison of the TIE ECON-O-KEY and Bell's Com Key.

*A comparison of the DSS operating procedures***Bell 718 Com Key with DSS :**

1. Operator depresses the ringing line and answers calling party.
2. Operator depresses Hold Button on her Com Key instrument, placing call on "Hold".
3. Operator then depresses a free intercom button (if available) which ties up the only register or preempts it if in use.
4. Operator then depresses the Direct Station Selection Key which connects to the station she wishes and she selectively pages to announce the call.
5. Paged party answers the call on his station by picking up the handset and pushing the appropriate line button.
6. If the called party does not answer, the operator must press the RECALL key and then another Direct Station Election Key.

Econ-O-Key with E-200A DSS :

1. Operator depresses the ringing line and answers calling party.
2. Operator goes directly to DSS and depresses station key which corresponds to station she wishes to call and announces the call. Line is automatically placed on hold.
3. Called party answers the call on his station by picking up the handset.
4. If the called party does not answer, the operator simply releases the first button and presses the second button Direct Station Selection Key.

NEW YORK TELEPHONE Co.,
MARKETING DEPARTMENT,

September 26, 1973.

Mr. SIRAGUSA: This is to confirm our order for a three to four months trial of a 6 station TIE II Key System to be installed at 1250 Broadway on a consignment basis as per our conversation of September 25, 1973.

JOSEPH R. SCISTAPEN,
Engineer.

EXHIBIT 4

AN UNFAIR COMPARISON BETWEEN OPERATING EASE

Introducing COM KEY is ECON-O-KEY's only competitor. When it's imitated and offered to you, here's what you can offer your customers. Question is, will you really want to?

STEP 8 If called party wants call re-routed to another extension, dial extension number, button 1155, and return to step 4.

STEP 7 If the unsuccessful operation repeats 6 or more optimal external power is installed.

STEP 6 If a single fit, attach the cap and push the cap into the hole. If the cap is too loose, push it into the hole with a screwdriver.

The proposed general
policy will not be a general
measure and cannot be
forwarded by parliament
The system is being

Only one operator
is possible. A female
in serving position with
busy line displays not
available even as an opt on

Enter a 5-digit code
 by dialing 305-471-7676
 to extend your stay
 at the Disney Cruise
 Center.

The above is a copy
of a letter from the
Executive Committee of the
Board of Directors of the
Bank of America, N.Y. & C.

1. 1991年12月1日
 2. 1991年12月1日
 3. 1991年12月1日
 4. 1991年12月1日
 5. 1991年12月1日

STEP 1 yield addresses
not in my answers

STEP 2 [continued]

STEP 3 $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$

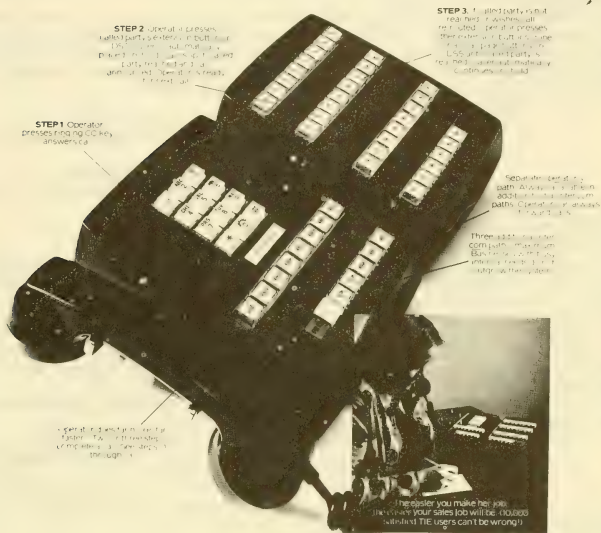
STEP 4

STEP 5 $\frac{1}{2}$ cup (125 ml) milk
 1 egg yolk
 1 egg white
 1 tsp (5 ml) lemon juice
 1 tsp (5 ml) vanilla
 1 tsp (5 ml) sugar



EEN COM KEY AND ECON-O-KEY[™] #1 IN A SERIES.

ECON-O-KEY's exclusive single-finger operation and human-engineered system forward calls in less than half the time. And pay added dividends in increased efficiency and morale. Can you afford to offer anything less?



If a system doesn't operate smoothly, quickly, easily and intuitively, it won't get bought. Or it won't stay sold. When you offer the latest business key system, how does it pay forward for an unfair comparison? Talk to the people who started the trend. Write or call for more information.

TIE

40 Warshaw Place Stamford Conn. 06902 (203) 327-4800 Cable: TIE Stamford Conn. Telex: 965851
TIE/COMMUNICATIONS, INC. THE BUSINESS COMMUNICATIONS EXPERTS

Exhibit 5 (Omitted.)

Exhibit 6

CUSTOM COMMUNICATIONS, INC.,
Naperville, Ill., April 2, 1974.

Mr. RICHARD DURANTE,
TIE/Communications,
Stamford, Conn.

DEAR RICHARD: Thanks a lot for your advice concerning the RCOU off premise card you gave to our installation department today. I think this new innovative circuit will allow us to offer TIE 1030 equipment to a considerably larger business Customer.

My installation manager, Guy Krysti, ask me to drop you a note expressing his appreciation of your effort not only for this card, but also for other procedures we have had in the past. It is my feeling that not only has the TIE products been very reliable but the engineer support has been outstanding.

Thanks again for your effort and constant cooperation.

Very truly yours,

JAMES M. ARNOLD,
President, Custom Communications, Inc.

LONG ISLAND SOUND SYSTEMS, INC.,
Lindenhurst, N.Y., October 10, 1973.

Mr. GILBERT ENGELS,
TIE/Communications Inc.,
Stamford, Conn.

DEAR GIL: I thought I would drop you a brief note to tell you that we have just completed installing our third TIE 2050 Key Telephone System. This system consisted of 17 stations, 10 trunks, and was installed, on time, with a minimum of installation problems.

I visited the customer and he expressed to me that the system was one of the better communications system he has ever used. Our customer was pleased, also, that the call announcing feature allows him to gain a great bit of free time each day from all his employees.

Thanks again for your continued cooperation from both an installation and sales viewpoint.

Very truly yours,

ROBERT BARASCH.

JARVIS, INC.,
Richmond, Va., February 27, 1974.

Mr. STEVE SHERMAN,
Sales Manager, TIE, Inc.,
Stamford, Conn.

DEAR STEVE: Thanks a lot for your recent sales seminar conducted for our combined group at our home office. This kind of support helps us intensely in promoting your product in our area and allows our salesmen to elaborate on the features of your equipment in a professional manner.

I thought you would also be interested to know that we have just cutover our second Econo Key TIE key telephone system this week in Richmond. Both of these systems are working very well and the customers' reactions have been tremendous.

It is important to us at Jarvis that new equipment which we offer to our customers has advanced, innovated features but operates on a trouble free basis. The original installation of your system seems to meet the high standards of your 1030 equipment. As you know, we have installed over 35 of your 1030 equipment in the Richmond area during the last two years and they have had a very high reliability factor.

Thanks again for your efforts. Looking forward to seeing you soon.

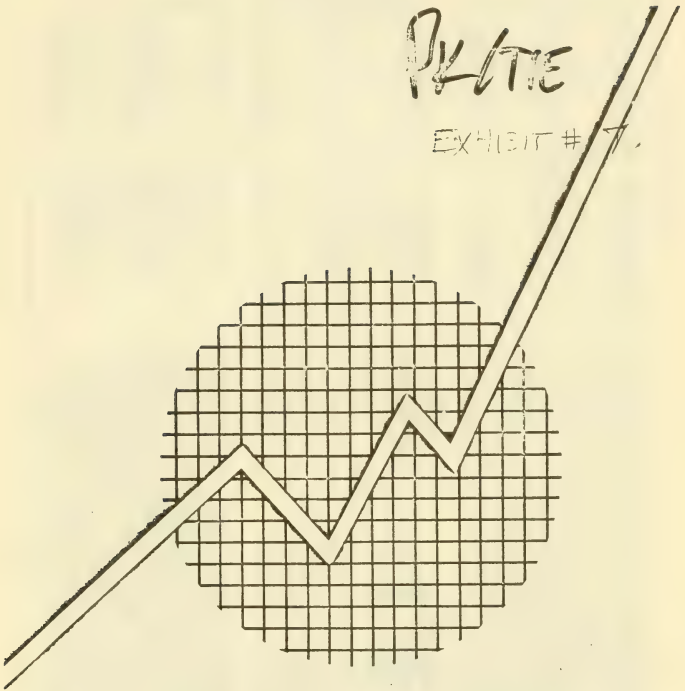
Sincerely,

CARROLL B. JARVIS,
Vice President.

EXHIBIT 7

PKTIE

EXHIBIT # 7.



CONSTRUCTION SPENDING WILL TOTAL
\$12.5 BILLION IN 1974

Table 2 Independent Telephone Company Statistics

Number of Telephones, United States (Including Puerto Rico) (000 omitted)			Number of Independent Telephone Companies			Total Operating Revenues (000,000 omitted)		
	YEAR END TOTAL	INCREASE		YEAR END TOTAL	DECREASE		YEAR S TOTAL	INCREASE
1961	11,074	-	1961	1,036	-	1961	\$1,117	\$
1966	16,193	4,119	1966	2,746	790	1966	1,879	75
1971	21,807	5,614	1971	1,807	439	1971	3,390	1,511
1972	23,187	1,480	1972	1,760	47	1972	3,871	481
10 year Growth	10,470 = 94% of year end '61		10 year Decrease	1,086 = 18% of year end '62		10 year Growth	\$2,801 = 274% of 1961 Revenues	
1973	24,670*	1,483*	1973	1,720*	40*	1973	4,310*	548*
1974	26,220*	1,550*	1974	1,680*	40*	1974	4,908*	698*
1975	27,875*	1,655*	1975	1,645*	35*	1975	5,442*	534*

Number of Independent Telephone Exchanges			Investment in Gross Plant (000,000 omitted)			Employees		
	YEAR END TOTAL	INCREASE		YEAR END TOTAL	INCREASE		YEAR END TOTAL	INCREASE
1961	10,770	-	1961	\$ 4,504	\$ -	1961	99,190	-
1966	10,997	227	1966	7,400	3,396	1966	117,200	18,110
1971	11,356	359	1971	14,275	6,375	1971	155,500	38,000
1972	11,445	89	1972	15,679	1,404	1972	157,000	1,700
10 year Growth	645 = 6.0% of year end '62		10 year Growth	\$10,674 = 210.2% of year-end '62		10 year Growth	57,600 = 57.9% of year end '62	
1973	11,535*	90*	1973	17,240*	1,521	1973	161,800*	4,800*
1974	11,626*	91*	1974	19,000*	1,800	1974	164,000*	2,200*
1975	11,718*	92*	1975	20,950*	1,950	1975	167,000*	3,000*

*Estimated
Source: USITA

Continued from page 4

munne to local ills, exempt from local responsibilities and answerable only to some higher authority in some other place. On the contrary, telephone companies should take the lead in nudging the community conscience, in pointing a finger at local deficiencies (or excesses) and in planning and helping to implement corrective programs. At the same time, telephone companies must demonstrate anew that they consist of people—hard-working friends and neighbors—who are as concerned with the quality of life in their respective communities as any other citizen. Telephone employees must be encouraged to demonstrate such concerns through leadership in civic, cultural and political activities at the grass roots level. Obviously, the best encouragement is for management to set the example.

In short, if we treat telephone employees as though they should have pride in who they are, what they do and where they do it, they will become proud. That pride, in turn, will be reflected in even better workmanship on the job and noted favorably by those who, otherwise, would be inclined to denigrate employee efforts as well as those of their employers.

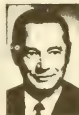
People form attitudes about things or other people without conscious effort. That means that attitudes can be molded by those who are concerned enough to do the molding. I submit that the telephone industry has attitude problems with at least two important "publics"—customers and employees—and that a success-

ful, simultaneous treatment of both will enhance our ability to deal with all those other adversities which often monopolize our time but which, in reality, should be secondary in priority. □

Case sees earnings, service as 'inseparable'

Weldon Case, President
Mid-Continent Telephone Corp.

THE TELEPHONE customer's fundamental requirement is that he be provided with good service at fair



W. Case

America's telephone service an unparalleled value for all consumer classifications.

But good service is not static. Our companies must progress constantly to keep pace with the expanding telephone needs of a population that is growing rapidly in affluence and sophistication as well as in numbers.

In consequence, the Independent telephone industry's expenditures on

new equipment and facilities, now at the \$2 billion annual level, must increase to an average of some \$3.6 billion per year over the decade immediately ahead. We are prepared to meet this challenge, but to do so our companies must be permitted to earn a fair return on their investment.

The fact is that earnings and service are inseparably linked. The average telephone company is able to generate internally only a little over half of its total construction expenditures. The other half must be attracted from investors, by means of either stock issues or various types of loans. Whatever the medium used, the availability of investment capital is dependent on the existence of adequate earnings.

Telephone executives have varying ideas as to what their companies should earn. The viewpoint that counts, however, is the investor's: it is he who decides how good our earnings must be in order to attract his money. And he has been telling us in unmistakable terms that our current earnings level is too low.

The common stocks of telephone companies are not faring well enough in today's marketplace—some of them have actually been selling at less than book value. Similarly, an unenthusiastic market has applied high interest rates to our bond issues, and our commercial loans also have required an interest premium.

These financing problems are directly attributable to the inadequate

Continued on page 6

Table 3 Bell System Statistics*

Number of Telephones** (000 omitted)			Investment in Total Telephone Plant (000,000 omitted)			Bell System Exchanges		
	Year End Total	Increase		Year End Total	Increase		Year End Total	Increase/Decrease
1962	68,393		1962	\$8,656		1961	6,760	
1963	71,152	2,759	1963	30,854	2,198	1964	6,760	-
1964	74,699	3,507	1964	33,385	2,531	1965	6,750	-10
1965	78,632	3,933	1965	36,229	2,844	1966	6,768	+18
1966	82,813	4,181	1966	39,116	3,087	1967	6,776	+8
1967	86,776	3,963	1967	42,509	3,393	1968	6,763	-13
1968	91,127	4,351	1968	46,092	3,583	1969	6,764	+1
1969	95,943	4,816	1969	50,480	4,388	1970	6,764	-
1970	99,903	3,960	1970	56,171	5,691	1971	6,761	-3
1971	103,699	3,796	1971	61,049	4,878	1972	6,739	-24
1972	108,811	5,112	1972	68,446	6,397	1973	6,747	+8
10-year Growth			10-year Growth					
40,418 = 59.1% of year end '62			\$39,790 = 139% of year end '62					
1973	114,178	5,367	1973	75,729	7,283			

Operating Revenues (000,000 omitted)			Operating-Company Employees		
	Year End Total	Increase		Year End Total	Increase/Decrease
1962	\$ 9,194		1962	578,403	
1963	9,796	602	1963	585,941	+ 7,538
1964	10,549	753	1964	604,577	+18,636
1965	11,320	771	1965	627,278	+22,701
1966	12,419	1,099	1966	666,982	+39,704
1967	13,311	892	1967	673,316	+ 6,334
1968	14,429	1,118	1968	696,749	+23,433
1969	16,058	1,629	1969	755,065	+58,316
1970	17,369	1,311	1970	793,196	+38,131
1971	18,952	1,583	1971	796,472	+ 3,276
1972	21,388	2,436	1972	797,202	+ 730
10-year Growth			10-year Growth		
\$12,194 = 133% of year-end '62			218,799 = 37.8% of year-end '62		
1973	23,218	1,830	1973	819,264	+22,062

*Bell System includes AT&T, its principal telephone subsidiaries, and Bell Affiliates (Southern New England Telephone Co. and Cincinnati Bell) whose common stocks are minority owned by AT&T.

**Includes Bell Service Telephones
†Estimated
Source AT&T

Continued from page 3

seen in the fact that while the 10-year period ending Dec. 31, 1972, saw a 139% net addition to plant value, there was only a 37.9% growth in employees. Comparable figures for the Independents are 210% and 57.9%.

In Table 4 one finds that the fastest decade rates of growth in telephone plant are buried cable (1013%), large private branch exchanges (310%), central office equipment (258%), and underground conduit (247%). In absolute growth in the 1962-72 decade,

CO equipment remains on top (and probably will for many years to come in view of the way—thoroughly logical—the FCC's Uniform System of Accounts allocates the parts of telephone plant), though second place has been taken over from aerial cable by buried cable.

For Bell, the top 10-year growth rates for plant and equipment spending are for: buried cable (up 365%); large PBXs (187%), central office equipment (160%), underground conduit (141%), vehicles and other work equipment (140%) and buildings (139%).

Again with Bell as in Independent figures, on a gross basis, CO equipment led, followed by total station equipment, buildings and buried cable.

Dataphones' five-year growth

Independent dataphone growth resumed again in the most recent year for which statistics are available, 1972 (Table 6). The net increase was 3037 subsets, which contributed to a five-year rise of 185% of year-end 1967. Bell's 30,500 additional dataphones in

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earnings produced by deficient pricing. Telephone rates have risen only about a third as much as the consumer price index over the past 10 years. However proud we properly may be of our past accomplishments in resisting inflationary pressures, the time now has come to correct this pricing maladjustment—in the long-term interests of our customers.

Here is the greatest challenge facing the telephone industry today. We must maintain and continuously enhance the high-quality service performance which consumers have ex-

pect right to expect of us. We can do this only by achieving fair earnings, which in many areas presently are unattainable without rate increases. But public, and hence regulatory, recognition of the full magnitude of the industrywide need for rate relief is dependent ultimately on a much-improved public understanding of this vital relationship between good service and adequate earnings.

On the national level, important progress is being made toward getting the message across to opinion leaders by means of a 50% expansion of the U. S. Independent Telephone Assn.'s public relations ad-

vertising budget. USITA's current advertising program and associated communications projects are focused very effectively on explaining the critical role of improved earnings in offsetting inflation and enabling service expansion.

But USITA cannot do the job alone. Telephone companies throughout the country must individually shoulder the principal responsibility for bringing the facts to the attention of the communities they serve.

In the final analysis, all opinions are local, and all campaigns aimed at effecting a basic change in public

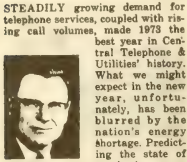
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telephone industry but only sharpen its ability to meet the circumstances. We are part of an industry of dedication, which can rise to meet many challenges. □

U.S. economy is the key to telco gains, Reuss says

Robert P. Reuss, President
Central Telephone & Utilities



R. P. Reuss

STEADILY growing demand for telephone services, coupled with rising call volumes, made 1973 the best year in Central Telephone & Utilities' history. What we might expect in the new year, unfortunately, has been blurred by the nation's energy shortage. Predicting the state of our business over the next 12 months is merely "best guessing" until we get a clearer picture of the dimension of the shortage and its potential impact on the national economy.

Energy-related dislocations in the economy, accompanied by higher unemployment and worsening material shortages, might be expected to reduce telephone gain and force cutbacks in construction budgets.

On the other hand, we could just as easily benefit from a sharp increase in long distance calling if fuel shortages force families and businessmen to curb travel plans.

Set against the backdrop of an uncertain economy, CTU's scenario for 1974 calls for construction expenditures of about \$130 million, a healthy increase from 1973's estimated \$117 million. Telephone spending will account for about \$120 million of our total outlay.

The major thrusts of our 1974 telephone program will be in the areas of modernizing and expanding switching facilities and outside plant to meet increased demand and to upgrade and improve the quality of customer service.

By the end of the year, we expect to be serving more than 12 million telephones, 75% of them with one-party service. One-third of our central office lines will offer touch calling capability and 73% of all outside plant will be subsurface.

The system will also have reached a significant milestone in 1974 with the addition of its first two central office electronic switching systems in North Carolina and Nevada.

The number of telephones we add during the year and call volume

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Table 7 Construction Expenditures by Major Independent Telephone Companies plus 1973 Year-End Data (\$ millions)

Company (Est. no. of stations)	Plant Investment Estimate	Operating Revenues (1973 est.)	SPENT			
			1972	1973	1974	1975
General Telephone & Electronics Corp. (11,300,000)	\$8,300	\$2,100	\$960	\$1,000	\$1,100	\$1,260
United Telecom- munications, Inc. (2,850,200)	1,951	513.4	226	272.8	310.3	346.2
Continental Telephone Corp. (1,903,000)	1,532	345.1	195	232	249	269
Central Telephone & Utilities Corp. (1,130,000)	835	300	132	117	130	140
Mid-Continent Telephone Corp. (624,000)	428	93	50.6	61	61	63
Rochester Telephone Corp. (542,500)	337.6	95.9	31.1	32.8	41.2	37.1
Puerto Rico Lincoln Telephone & Telegraph Co. (252,400)	147	40.7	16	18.1	22	20.8
Commonwealth Telephone Co. (165,000)	88	21	9.9	11.8	12.7	13.9
Allied Telephone Co. (129,000)	84	18.5	7.6	10	14.2	12
Winter Park Telephone Co. (121,700)	80	21	16.3	19	18	18
Telephone Utilities, Inc. (106,500)	87.5	14.15	12.25	4.39	7.06	7.5
Illinois Consolidated Telephone Co. (98,500)	52	15.4	6.05	6.1	5.0	7.0
Indiana Telephone Corp. (84,028)	41	12.46	4.73	5.68	7.66	4.78
Lorain Telephone Co. (71,900)	44	11.5	3.6	3.8	4.5	not available
City of Anchorage Telephone Utility (78,780)	56	14	11.3	14.08	11.39	not available
Telephone Utilities of Pennsylvania, Inc. (64,500)	44.9	9.45	4.0	4.0	4.0	not available
Concord Telephone Co. (67,670)	32.15	8.7	3.41	3.45	3.5	not available
Telephone & Data Systems, Inc. (62,879)	40.47	8.35	4.95	4.41	8.82	7.69
North West Telephone Co. (48,000)	29	6.8	2.22	4.0	5.0	7.0
Newark Telephone Co. (43,500)	18.75	5.3	1.46	2.5	2.0	not available

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and inside plant equipment (in that order).

Two important traits

Recently AT&T Board Chairman John D. deButts announced that Bell operating companies will move, as a long-term goal, toward cost-based pricing and away from flat rate service. This is an aggressive response to a persistent competitive threat—and one more firm step among many taken by telcos, both

Independent and Bell, this year. In the increasingly competitive climate that will exist in 1974, aggressiveness along with innovativeness will be necessary operating characteristics for the telco which wants to prosper. More and more telcos are showing up this way, and this augurs well for their future. It should help them get through the uncertainties of 1974's first half and on into the better business conditions forecast by many for the second half.

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which now totals approximately 211 million, will grow by nearly two million persons in 1974 and 10 million over the next five years. More than 1.6 million new households are expected to be formed during 1974, representing a significant increase over the 76 million households in existence in the U.S. at the end of 1973. Included in this anticipated expansion is the growing trend toward "non-family" households, in which only one person resides in a dwelling unit.

To capitalize further on opportunities in the residential market, the GTE telephone companies will continue to direct strong attention during 1974 to service improvement programs and new facilities that make possible new and expanded services. In addition, local calling areas will be enlarged in many operating territories, and direct-dialing will be extended to additional exchanges. Marketing programs for extension telephones, "decorator" instruments and specialized residential services will be emphasized.

As our business customers' needs become increasingly complex in 1974, we will introduce better ways to serve them through a variety of new products and services, as well as through more versatile use of existing service offerings. We are confident that our ability to provide a wide range of services, tailored to meet the customer's specific needs, will enable us to maintain our traditionally strong position in the highly competitive business market.

We will continue during 1974 to place strong emphasis on expanding the application of new technological advances. Additional electronic switching systems will be installed in large and small exchanges, thus giving us the capability of offering a wider range of services to a broadening market.

At the same time, the GTE telephone companies will continue to make more efficient use of existing transmission facilities by extensive installations of new and improved equipment. The buried cable program will be extended to many more GTE communities with the result that service reliability will be improved while the elimination of pole lines will enhance the appearance of the area.

The shortage of energy has become a matter of critical importance in recent months, and is expected to remain a major national problem for the next several years. How seriously the telephone industry will be affected remains to be seen, but all GTE companies are already participating in a coordinated program aimed at conserving electricity and fuel—both for heating and for motor vehicles. Our employees are extending these conservation measures to

their homes as well. This overall program was born of the firm belief that companies and individuals must take strong steps now in an effort to avoid the serious problems that can arise from excessive use of our energy resources during a period of shortages.

The GTE companies will exert their best efforts as well as their diverse technological skills toward assuring that communications services continue without interruptions caused by energy shortages. We view this as a matter of vital importance to our customers, the communities we serve and the nation.

Dealing with the numerous problems arising from inflation, rapid growth, the energy crisis and other major issues with which we are faced will not be easy. And these problems will certainly make it even more important for us to continue and re-emphasize our efforts to achieve greater appreciation among customers, regulatory bodies and the public at large of the close relationship between the telephone industry's economic health and the provision of high quality communications. □

Commonwealth emphasis shifts to growth spending

John B. Hibbard, President
Commonwealth Telephone Co.

OUR 1974 and 1975 construction programs represented an increase of approximately 10% over the preceding year in terms of capital expenditures. Our construction programs at Commonwealth reflect a history of service improvements.



J. B. Hibbard

We have spent a considerable portion of our construction dollar for "modernization": for example, 17.9% in 1973, while "growth" and "standing still" represented 60.8% and 21.3%, respectively, of the capital dollar.

Our 1974 program is budgeted at \$12.7 million with a change in allocation of capital dollars—63.5% for "growth" and 31.2% for "standing still" expenditures. Perhaps more significant is the changing trend in the distribution of the capital dollar to switching, station apparatus, outside plant, etc. During the 1968-72 period, Commonwealth allocated 19.9% of its construction dollar to switching equipment, 20.2% for station apparatus, and 47.1% for hardwired outside plant. In our 1974 program, the distribution is

set at 26.4% for switching, 27.5% for station apparatus, and 33% for hardwired outside plant. Our central office modernization program, in the 1974-76 period, includes five major central office replacements—more than in other periods in our history.

Construction planning seems particularly challenging at this time; and flexibility and imagination seem more important than ever. Accommodations must be made to the impact of continuing change in regulatory thinking, developing competition and the possibilities raised by the energy situation. □

Rochester Tel cites pace of continuing change

J. H. Cline, Vice President—
Engineering & Construction
Rochester Telephone Corp.

THE ACCELERATING pace of change and its ripple effect on all sections of our current society comprise what is probably the single most important element in our industry today. It's not a new trend. Change is constant, of course. But it seems to me that historically it has been a less urgent force than it is today, easier to respond to and more predictable.

Those days have vanished. Change is still change, but there's an uncertainty about it, a relentlessness that's awesome. We now find ourselves as a nation, as an industry, as people, in another era, one beset with shortages, with rising prices, with mounting public distrust of once honored institutions.

At the same time it seems to me that our industry's potential for service, for contributing to the public good has never been greater. Admittedly, there are certain negative influences: certainly the energy crisis will have an impact on our operations, if not our service levels; interconnect suppliers and other vendors will make further inroads on our revenues, unless we compete imaginatively and effectively; shortages of critical materials will become worse and will probably affect our capability for improving and expanding our systems; and, finally, there's little doubt that inflation will continue to erode our traditional rate structures and complicate our financings.

But at the risk of sounding Polly-



J. H. Cline

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annish, consider these positives: from all indications, the energy crisis will result in increased telephone usage, as businesses and people reduce their travel. And let me add that it's not a question of our benefiting from a national calamity; it's simply a case of providing a substitute service.

Competition. In our judgment, there are some fresh winds blowing today that carry the promise of shifting the direction of some of the competitive trends within our industry. Some forms of competition will undoubtedly be strengthened, but recent challenges are focusing new attention on the whole issue of whether competition in an industry that is providing by far the finest communications service in the world is in the best interests of the public.

Shortages. The immediate impact could be serious, but the long-term effect will be to intensify the search for substitute materials and methods.

Inflation. Experience is clearly proving the need for frequent rate relief and the development and implementation of new rating concepts to insure continued high quality service.

Cardinal Newman once wrote that "to live is to change, and to be perfect is to change often." We can never have the temerity to claim we offer perfect telephone service, but we can always try. That should remain our objective, and to achieve it, we cannot simply survive change, we must anticipate and shape it. □

'We can't slow down and wait': Kertz

Hubert L. Kertz
Vice President—Construction Plans
American Telephone & Telegraph Co.

THE BELL SYSTEM expects to spend slightly less than \$10 billion for construction projects in 1974 to meet the needs for telecommunications services.



H. L. Kertz

The reason: Despite the prospects of an economic decline, we can't slow down and wait. We would if the public would, but the public has a way of wanting what it wants when it wants it.

We have to be ready. That takes time and money.

That 1974 construction budget is designed to provide facilities for:

- New homes, new factories, new shopping centers, increased

usage of the telephone.

- Relocating equipment for today's highly mobile society.
- Replacing worn out or damaged plant.

About 64% of the Bell System program is required to meet the growth factor. That covers providing service to new customers. It also provides for increasing usage and demand for more advanced service by our existing customers.

Modernizing accounts for about 14% of the budget. This is to provide improved standards of operation, increased operating efficiency and also better working conditions.

About 17% of the construction budget will be used to relocate and reinstall telephones to accommodate the movement of customers—both for their homes and their businesses.

We will spend about 5% for plant replacement—to restore service impaired by storms or other natural disasters, to replace worn out equipment and to relocate facilities to meet public requirements such as highway construction.

A major amount of the modernization outlay will be for conversions of panel and step-by-step central offices to electronic switching systems. By the end of 1974, ESS will serve 14 million telephones.

Another modernizing element is the Traffic Service Position System which replaces manual toll card boards with cordless consoles. TSPS permits customers to dial credit card, collect and pay station calls with minimum operator help. About 57 million phones will be connected to TSPS-type offices by the end of 1974.

Modernization also includes: dial-tone-first projects for coin lines, 911 emergency service, improvement of network transmission and rural service improvement involving enlargement of base rate area boundaries and reduction of rural zones.

Planning plays a vital role. The individual Bell operating companies carefully prepare their own construction budgets and then send them to AT&T where they are blended to form a Bell System budget. The planners consider the facilities and equipment needs but are aware that what is added tomorrow must work with what we have today.

They also are alert to the inflation that has influenced the total size of the construction budget tremendously in recent years. Inflation's effect on the '74 budget is estimated at about \$3 billion with reference to 1967 costs.

But when a housewife in Boulder, Colo., or a businessman in Auburn, Ind., wants a telephone installed, they don't want to wait—or hear about the pressures of inflation.

We have to be ready for that whenever the request is made. □

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Exhibit 8

[From the New York Times, Feb. 5, 1974]

A.T. & T. 1973 NET IS UP 18.2 PERCENT TO RECORD

UTILITY LEADS WORLD IN PROFITS—TOTAL REVENUES CLIMB

(By Gene Smith)

The American Telephone and Telegraph Company report for 1973 issued yesterday showed that the giant utility was still the world's biggest money maker.

The preliminary annual report placed earnings at a record \$2.99-billion, equal to \$5.06 a share. This was 18.2 per cent higher than the previous high of \$2.53-billion, or \$4.34 a share on fewer shares, reported a year earlier.

The telephone company's revenues increased by 12.6 per cent in 1973 to \$23.53-billion from \$20.90-billion in 1972.

By contrast, the Exxon Corporation displaced the General Motors Corporation as the American manufacturer with the highest profits. Exxon's 1973 profits rose by 59.5 per cent to a peak of \$2.44-billion, while General Motors reported 1973 net of just under \$2.40-billion, up 10.9 per cent over 1972.

Commenting on 1973 earnings, John D. deButts, chairman of A.T. & T. said: "While 1973's results are good, they're not good enough in the context of inflation and the amount of capital required to provide ever-improving service. Our aim is to improve on the 8.30 per cent return on total investment we achieved last year."

RISE IN SALES REPORTED

He pointed out that 1973 net income included \$46.6-million from the sale of shares of the Communications Satellite Corporation. This produced a gain of almost \$20-million, or 8 cents a share, net of related income tax.

The A.T. & T. earnings report was released just after noon. The company's stock closed at 50¾, off ⅝, in trading on the Big Board. Its turnover of 148,500 shares made it the third most active issue of the day. The range in 1973-74 trading is from a low of 45¾ to a high of 55.

Mr. deButts stated for the first time "it now seems probable that A.T. & T. will not offer common equity in 1974." He continued:

"Rather, we anticipate meeting Bell System requirements for external capital in 1974 . . . primarily through reliance on debt issues. We are looking ahead to 1975 and the more than \$1.5-billion in common equity we expect to derive at that time through exercise of the warrants we issued in 1970."

On Jan. 16, A.T. & T. announced that it would seek stockholder authorization at the annual meeting on April 17 for an additional 50 million shares of preferred stock. The company now has 750 million shares of common and 50 million shares of preferred stock for a total of 800 million authorized capital shares.

The A.T. & T. chairman repeated earlier predictions that the company would spend "about \$10-billion" for expansion this year, up from the \$9.3-billion in 1973.

"Attracting this new money on sound terms in today's financial markets means we must achieve profit performance comparable to that of other growing businesses with whom we compete for investor interest," Mr. deButts said. Our responsibilities to our customers as well as our share owners require that we do no less."

He attributed 1973's improved earnings to the combination of "increased usage of telephone service, effective expense control and rate relief provided by regulators aware of the effects of persistent inflation on telephone companies."

Turning to the future, Mr. deButts said:

"While growth in 1974 may not prove as robust as it was last year, we look forward to a continuing high level of demand for our services and continued growth in earnings."

The report showed that preferred dividend requirements rose in 1973 to \$185.96-million from \$145.7-million in 1972, while the average number of shares outstanding increased to 554,258,000 from 549,501,000 a year ago.

[From The New York Times, June 20, 1974]

REVENUES AND NET INCOME OF A.T. & T. RISE TO HIGHS

(By Gene Smith)

The American Telephone and Telegraph Company and its subsidiaries achieved new highs in second-quarter revenues and net income, according to the quarterly report released yesterday. Revenues and earnings for the 12 months ended May 31 were also at a new high.

This prompted John D. deButts, chairman, to say:

"I take a great deal of pride in the Bell System's vigorous earnings growth in the face of a general economic downturn. If the second half confirms the grad-

nal recovery that a number of economists predict, 1974 for all its difficulties could turn out to be a very good year for us."

The report placed revenues for the second quarter at \$6.51-billion, up 12 per cent over the \$5.81-billion of a year ago. Net income rose by 11.8 per cent to \$839.2-million, or \$1.40 a share, from \$750.8-million, or \$1.28 a share one fewer shares, preferred dividend requirements rose to \$58-million from \$44.5-million a year ago. There was an average of 556,875,000 shares outstanding in the latest quarter against 553,728,000 a year ago.

A. T. & T. also reported the election of Charles L. Brown, Jr. as executive vice president effective July 1. Mr. Brown, 52 years old, had been president of the Illinois Bell Telephone Company since 1969. Effective Aug. 1 Mr. Brown will succeed John J. Scanlon as A. T. & T.'s chief financial officer. Mr. Scanlon, who joined the Bell System at age 16 will have completed almost 49 years with the company when he retires on July 31.

James E. Olson, president of the Indiana Bell Telephone Company, was named to succeed Mr. Brown at Illinois Bell, while John W. Arbuckle, vice president-operations for the New Jersey Bell Telephone Company, was chosen president of Indiana Bell.

The A. T. & T. report for the 12 months ended May 31 showed operating revenues at a new high of \$24.71-billion, up 12.2 per cent over the \$22.01-billion of a year ago. Net income rose by 14.8 per cent to a new high of \$3.15-billion, or \$5.29 a share, from \$2.75-billion, or \$4.68 a share on fewer shares, a year earlier. The 1974 net included a gain of 8 cents a share as the profit from sale of shares of the Communications Satellite Corporation.

Mr. de Butts noted that despite the fact that "economic indicators remain indecisive, "growth in demand for communications services remains strong although "below that of a year ago." He reported a net gain of 5 million telephones in service in the year ended May 31, raising the total to 112-million. During the second quarter, the Bell System handled 2.6 billion long distance calls, or 8.5 per cent more than in the like 1973 quarter.

However, Mr. deButts cautioned that "the economy and labor negotiations currently under way in the Bell System are the two factors that will have a significant bearing on the year's results." The A. T. & T. chief executive said the company "believes that new labor agreements can be worked out through constructive bargaining without work interruptions."

But, he added:

"Labor costs faced by the company in the latter half of the year will be higher . . . will burden earnings capabilities and will require a number of Bell System companies to seek authorization for higher rates from their regulatory commissions."

The report issued yesterday covered the periods ended May 31. A. T. & T. traditionally issues quarterly reports for periods ending February, May, August and November and then an annual report based on the calendar year.

In a separate announcement A. T. & T. said that construction had begun in northern New Jersey on the first link of a new supercity transmission system, known as "millimeter waveguide." This is capable of transmitting 250,000 telephone calls simultaneously.

The project, in Morris County, involves burying an outer protective sheath four feet underground along an 8½-mile route from the Long Lines department office in Roxbury Township South to Mount Olive Township and then to Washington Township.

A. T. & T. slipped 1¼ to 46¼ in yesterday's trading on the Big Board. Its 1974 range is from 45¼ to 53.

Exhibit 9

NARUC ANNUAL CONVENTION,
Seattle, Wash., September 20, 1973.

J. D. DEBUTTS.

AN UNUSUAL OBLIGATION

It is a signal honor to have the opportunity to address this convention. I do not know how many of my predecessors as chief executive officer of the Bell System have been afforded this privilege. Perhaps only one—and that was back in 1927. While I dare not hope that I can use this occasion as well as Walter Gifford did, the prospect that your next invitation may not come for another 46 years suggests that I had better try.

When Mr. Gifford came before this organization almost half a century ago in Dallas, he declared it his intention to "state very briefly the principles that guide the management of the Bell System." What he said then has become the classic statement of our business' purposes.

"The fact," Mr. Gifford said, "that such a large part of the entire telephone service of the country rests solely upon this Company and its Associated Companies imposes on the management an unusual obligation to see to it that the service shall at all times be adequate, dependable and satisfactory." And he went on to say that in his view the only sound policy that would fulfill this unusual obligation is "to continue to furnish the best possible telephone service at the lowest cost consistent with financial safety."

How valid—and how viable—is this policy today?

There is no question in my mind that down through the years it has served our business well. What is more to the point, it has served the public well.

It has served the public well in terms of the quality, dependability and availability of service. It has served the public well in terms of the efficiency and economy with which that service is provided. And it has served the public well in terms of continuously advancing operational proficiency and a pace of technological innovation unmatched to my knowledge in any other industry. In short, I think it's fair to say that what Mr. Gifford called the "unusual obligation" resting on the Bell System and the independent telephone companies who share it has been by any reasonable standard well met.

From what, then, does this "unusual obligation" arise?

It arises quite simply from the way we in the United States have chosen to supply ourselves with communications services. Almost unique among the nations of the world, this country has entrusted the development and operation of its communications resources to private enterprise. It has endowed these enterprises with the rights and responsibilities of common carriers, each solely privileged to purvey its services within its territory but all in turn strictly accountable through regulation to the public they serve. In short, what gives rise to the unusual obligation that motivates our industry and inspires its accomplishments is what we have come to call the common carrier principle.

If there is no question that the application of this principle to telecommunications has served our country well down through the years, there is no question either that not since the days of its inception has this principle been more severely challenged than it is today.

Whence comes this challenge?

It comes from entrepreneurs who see opportunities for profit in serving selected segments of the telecommunications market and who—not unnaturally—want a piece of the action. It comes from manufacturers or, in a good many instances, importers of communication hardware who seek to supplant the regulated common carriers in supply the terminals for the common carrier network. It comes from newly authorized purveyors of communications services who, unburdened by any obligation to the whole body of customers, address their attention—again, not unnaturally—to those it costs least to serve and profits most.

Admittedly the challenge comes from some customers as well. Mostly these are large businesses who see advantage to themselves in the new pricing arrangement competition will engender but who have no obligation—and therefore no disposition—to reckon the cost of those new arrangements to the public at large.

And the challenge comes, too, from some members of the regulatory community itself. Doubtless some of it reflects a wariness of sheer size and the potential for abuse that goes with it. Some of it may reflect the premise—to my mind insufficiently examined—that in all times and places competition is good and monopolies are bad and that regardless of the costs and consequences, the forer should supplant the latter.

But what I have been saying to the people inside our business is that we would deceive ourselves did we not recognize that regulators—indeed thoughtful people in all walks of life—are constantly and earnestly testing and appraising our performance and asking whether competition might not spur progress faster than present arrangements.

That this issue ought to be debated I can hardly deny and the Bell System wouldn't get very far if it did. Currently it is the focus of regulatory pro-

ceedings bearing on such matters as interconnection, certification, intercity private line rates, the use of satellites for domestic communications and the effects—for good or ill—of vertical integration in the telecommunications industry. In addition, all these topics—and more—figure in the current hearings of Senator Hart's Subcommittee on Anti-Trust and Monopoly.

At issue in all these matters is the degree to which competition should obtain in a field that has been brought to its current state of development through the application of basic principles—end-to-end responsibility for service, the systems concept, the common carrier principle itself—that the doctrine of competition for competition's sake puts in jeopardy and could in time destroy.

What concerns me is that, although debate over this issue has been going on with increasing intensity for some years now, the general public remains to this date very largely unaware of it or of its stake in the outcome.

What concerns me, too, is that so basic a question might over time get resolved in bits and pieces—a docket at a time, so to speak—and that, when all is said and done and the verdict rendered, the public interest will not appear among the beneficiaries. Surely this will be the consequence if we do not ourselves speak out for what we believe.

What do we believe?

First of all, we believe that if competition is, as its advocates allege, the wave of the future in telecommunications, our responsibilities then require us to be as effective competitors as we know how to be. Indeed, in those sectors of the industry in which competition has already been mandated, we have long since recognized that we have an obligation to meet competition for services which, if lost to others, would result in an increase in the costs of our common carrier service or deny opportunities for cost reduction in the future. In short, if the rules are going to be changed, we'll live by the new rules and, if those new rules are fair and fairly administered, we have every confidence that we can give a good account of ourselves. Indeed, as of now I don't think there remains any doubt—among our customers, among our own people, among our competitors, as to whether the Bell System intends to compete or knows how to compete.

At the same time we have recognized that the urgencies of competition do not exempt us from responsibility for vigorous examination of its long-term consequences or from the necessity to face up to the decisions and actions that the results of this examination might logically require of us. Accordingly we have been asking ourselves whether in the event that objective deliberation should bring us to the conclusion that competition and the fragmentation of function and responsibility that stem from it would seriously impair service over the long run and add significantly to its costs, *we do not then have an obligation—an unusual obligation, if you will—to take a stand in opposition to current trends and prepare ourselves to debate the issue explicitly, not only on the legal, legislative and regulatory fronts, but before the court of public opinion as well.*

We have reached the conviction that the time has come to do just that.

We believe that the people of this country have been well served—and will continue to be best served—by a concept that has provided it the most highly developed communications service in the world, the concept of a universal system, designed and configured on equitable terms to all its users, wherever they are, whoever they may be.

Further we believe that these services are so “affected with the public interest” as to require that their prices and the profits that drive from them be subject to continuing public regulation.

And we believe, too, that the public interest, construed as we must construe it as the widest availability of high quality communications at the lowest over-all cost to all its users, cannot help but be impaired by the duplication of facilities and the division of responsibility that will inevitably ensue from the further encroachment of competition in an industry where compatibility of components and prices coordination of process are crucial.

In short, we believe that there is something right about the common carrier principle. There is something right about regulation. And—given the nature of our industry—there is something right about monopoly—regulated monopoly. Believing these things, we believe, too, that the time has come for those who believe so to say so.

The time has come to alert the public to what the public is largely unaware—and that is that regulatory decisions have already been taken in its name that, whatever advantages they may afford for *some* people, cannot help but in the long run hurt most people.

The time has come, we believe, for a thorough thinking-through of the future of telecommunications in this country—a thinking-through sufficiently objective as to at least admit the possibility that there may be sectors of our economy—and telecommunications one of them—where the nation is better served by modes of cooperation than by modes of competition, by working together rather than working at odds.

The time has come, then, for a moratorium on further experiments in economics—a moratorium sufficient to permit a systematic evaluation—not merely of the question of whether competition might be feasible in this or that segment of telecommunications—but of the more basic question of the long-term impact of its further extension on the public at large, the adequacy, dependability and availability of its service and the price it will have to pay for it.

In this thinking-through, the members of this organization, it seems to me, are uniquely equipped to take the lead. I say this because your first responsibility is to the public at large—not to some customers but to all customers and not only to today's public but tomorrow's as well.

Now what has brought us to the convictions I have expressed here—admittedly in the most general terms?

Three things: first, the record of what has been accomplished over more than half a century of operation under the common carrier principle; second, *the not altogether happy experience of competition—or what goes by that name—in those sectors of telecommunications where it has already been mandated and what that experience forebodes for the future; and, third, a recognition, born of that experience, that the alternative to regulated monopoly confronting us is not free and open competition but contrived competition—in short, government-sponsored market allocation with all the potential for inefficiency this implies.*

What has been accomplished by the common carrier principle down through the years in embodied in the nationwide switched network, a technological achievement unmatched in scale and complexity and the precision of its operations. Capable on command of performing any one of seven million billion possible interconnections, this network is too valuable a resource to risk a perhaps irreversible threat to its performance that would ensue from fragmentation of responsibility for that performance.

This risk is not an imaginary one—as witness our experience of the impact of customer-provided terminal gear over the five years since “Carterfone.” For example, current studies indicate that intercity private line serving links equipped with at least one customer-provided terminal generate trouble reports at a rate at least 50 per cent higher than do serving links equipped with Bell terminals only. And studies now in progress of message telephone lines are showing like results—a trouble report rate for lines equipped with customer-provided terminals more than 25 per cent higher than for lines connected solely to Bell terminals.

Admittedly these studies do not by themselves tell us how many wrong numbers or how much crosstalk and other “harms” to the network and the service of others arise from customer-provided terminals as compared to telephone company provided terminals. *I would suggest, however, that the disparities in trouble report rates I have cited are sufficiently consequential as to suggest an urgent need for caution before proceeding to a further liberalization of interconnection requirements.* How high are the stakes will be clearly evident from the fact that an increase of but one per cent in ineffective calling attempts will add some \$75 million to the capital costs of the network and some \$27 million to annual operating expenses.

For some five years now, we have pursued our announced aim of facilitating the connection of customer-provided equipment by making interface devices as simple and inexpensive as possible. To pretend, however, that our experience thus far has been satisfactory—to us or to all our customers—would be just that—to pretend. Competing goals of network protection and low cost require compromises that are not fully satisfactory on either count. Awkward as they sometimes are, we can—because we must—“live with” these compromises. But *we cannot live with the deterioration of network performance that would be*

the inevitable consequence of "certification" and the proliferation of customer-provided terminals that would ensue from it. No system of certification we can envision—and no interface requirement—can provide a fully adequate alternative to the unequivocal and undivided responsibility for service that the common carrier principle imposes.

It is regulation's role to see to it that this responsibility is fulfilled. To see that it is, some commissions have moved to establish explicit service standards. Obviously we can hardly object to being held rigorously to account for service for which we are in fact responsible. But when that responsibility is divided, not only is our own ability to meet it impaired but so is regulation's ability to see that we do. In view of the impact of interconnection on their constituents—that is, all users of communications service—it seems to me imperative that state commissions, as some have done already, take prompt initiatives to assure they are not precluded from exercising this fundamental aspect of their jurisdiction.

Not the least of the reasons for doing so are dollars-and-cents reasons.

As you know, revenues from the telephone companies' vertical and toll services help keep exchange rates low. You know, too, that higher charges to business customers permit lower charges to residence customers. And country folk don't pay more for their telephone service than do city folk—this even though it often costs more to serve them.

We call this "value of service" pricing. Its aim is to bring service within the economic reach of as many people as possible, thereby enhancing the usefulness of service for everybody. Certainly it's hard to imagine how today's virtually universal service could have been achieved without it. Indeed, I will assert that it could not. And I will assert, too, that no special interest outweighs the public interest in preserving this principle.

For where will the burden of increasing interconnection fall? Surely not on the customers for vertical services. And surely not on the businessman who—for whatever reasons of his own—chooses to buy a PBX from a vendor rather than lease it from the telephone company. No, the burden will fall on the average customer, the users of the basic services that it has been regulatory policy from time immemorial to keep as inexpensive as possible. [As interconnection siphons off revenues from other services, not only the telephone companies but the commissions that regulate them will find themselves increasingly restricted in their ability to pursue what they have hitherto considered a basic aim—an aim that I for one am not prepared to abandon.]

But that is only the beginning. Those of you who are learned in the mysteries of separations procedures recognize that about 18 per cent of station equipment costs are assigned to interstate operations for rate making purposes. [And you will recognize, too, that as customers replace telephone company terminals with terminals they provide themselves a shift—a potentially massive shift—of revenue requirements will occur. By one estimate, a ten per cent loss of the terminal market by the common carriers will increase state revenue requirements by almost \$220 million a year, a 50 per cent loss by more than \$1.0 billion. (The burden of this shift, by the way, falls disproportionately on the independent telephone companies, adding in the event of a 50 per cent loss of the terminal market over \$250 million to their annual revenue requirements.)]

How rapid competitive inroads in the telecommunications market will be, I cannot predict. What I do know, however, is that the prime targets of competition are precisely those segments of this market that are the most profitable ones. And I know, too, that *whether these inroads are slow or fast, the consequence will be the same—a shift of revenue requirements to the states and ultimately upon the last bastion of common carrier revenue, basic telephone service.* The ultimate effect of this shift is not hard to see—a shutoff of service to people with marginal incomes. This, I submit, is the reverse of the traditional objective of the common carrier industry and of its regulators. It is the reverse of what has heretofore been considered the public interest.

I for one am inclined to doubt that a public already sullen if not mutinous over rising costs that make rate increases clearly necessary will be disposed to welcome further increases of the dimensions I have cited. Particularly will they be disposed not to welcome them when they come to recognize that for what only some people want everybody pays.

But is the public even faintly aware of such a prospect? I think not. Is it not then part of our unusual obligation to see that the public is made aware?

I think it is. What is more, I would at least raise a question as to whether regulators, charged as they are with defining and defending the public interest, do not have a like obligation to do what they can to make sure that by speaking out before it is too late the public understands its stake in the interconnection issue. For however that issue is decided, it will be the public that bears the consequences and pays the price.

Compared to our experience of the impact of the inter-connection of customer-provided equipment, our experience of the consequences of competition from the so-called specialized common carriers in the private line field has been relatively limited. Indeed, in a very real sense, it might be said that we have had no experience of such competition at all.

To be sure, MCI for more than a year now has been offering private-line services on the route between Chicago and St. Louis. But to conclude from this sector of the private line market is to adopt a definition of that word that does not accord with that in any dictionary I have consulted.

What may not be widely known is that—as of right now, not 20 months since it opened for business—MCI has captured over 80 percent of Bell System point-to-point private line services between customer premises in those two cities. What is more, 40 per cent of MCI customers are businesses that formerly relied exclusively on the Bell System's long distance services between the two cities, but who now use MCI private lines for a substantial portion of their requirements.

That would seem to indicate that MCI is a pretty stiff competitor. I would submit, however, that we have yet to see competition or anything resembling competition in the market for private line services between Chicago and St. Louis.

Why, then, did our customers switch? Not because MCI offers services that are in any significant way new or different from those the existing common carriers offer. They switched for the same reason that you or I might switch were we offered a choice between virtually equivalent products, one of which bears a price tag about a third less than the other.

That, I submit, is not competition.

Let me take a moment to tell you why I say that.

Some of you will recall that again and again the Bell System's submissions to the FCC in the specialized common carrier case asserted that, reluctant as we might be to see the end of nationwide average pricing in the private line field, should the Commission nonetheless find it in the the public interest to permit selective entry by these specialized carriers we would be ready to live with the consequences provided only that the same ground rules apply to all competing parties, including us. The Commission's order, you will recall, provided ample—and eloquent—reassurance on this point.

One measure of our reluctance to part—even on a limited basis—with the principle of nationwide averaging is the fact that it was not until 14 months after the first new intercity carrier became operational that we finally sought Commission permission to file—and to put in effect as promptly as possible—restructured private line rates responding to the newly competitive environment confronting us. What we proposed—and still propose—is a two-level rate structure that calls for lower rates on the high capacity, low cost routes the specialized common carriers seek to serve and—necessarily—higher rates elsewhere.

That was in February—to this date it remains a question as to whether there will in fact be genuine competition in the private line field or whether what we confront will not turn out to be simply an arbitrary allocation of the market to others in name of competition and heedless of the higher costs to the public that will be its inevitable consequence. I assure you the Bell System is not ready to accommodate itself peaceably to that prospect.

This experience foreshadows what can happen as our presumed competitors extend their activities selectively to other routes and, eventually, to most if not all of the more profitable major communications corridors in the nation. In less than three years, these carriers—at their currently projected level of development—will have siphoned off no less than \$220 million of revenues that private line services would otherwise contribute to meeting the common costs of the Bell System's other services.

Again where will the burden fall? Again it will fall on the average customer in the form of higher exchange rates, higher long distance charges. It will fall,

too, on private line customers in cities and towns on the high cost routes the specialized common carriers choose not to serve. Again for what only some people want everybody pays.

We believe that this prospect is a sufficiently realistic one as to raise a serious question as to whether further entry in the private line field truly meets the public interest. When the FCC determined—now more than two years ago—that the public interest would be served by permitting virtually free entry to the private line field, it did so without any evidentiary hearings. Surely a decision of this dimension, threatening as it does the undoing of basic policies to which this nation very largely owes the advanced development of its communications services, merits nothing less than the fullest examination of its potential consequences. The time for such an examination is now.

What has been most useful—and at the same time most troubling—about the interval since the FCC mandated what it called “competition” in the private line field is that it forced us to a recognition that the prospect confronting us is not free and open competition as an alternative to monopoly but rather a third alternative affording the virtues of neither and the disadvantages of both, and that is regulated competition—a division of the marketplace arbitrarily imposed and artificially maintained.

I recognize that the question of regulatory policy at issue here is a profoundly difficult and vexing one. Admittedly there is a certain attractiveness in the notion that, where competition can be substituted for regulation it ought to be. Our instincts as Americans, reared in the free enterprise tradition, support the notion.

On the other hand, it appears worth noting that the fervor for competition on the part of some regulatory officials has not been accompanied by any demonstration of enthusiasm for its necessary concomitant—deregulation.

Which brings us to the question: *can there be competition—real competition—when not all the parties to it enjoy the same freedoms or bear the same responsibilities, endure the same constraints?* A free market, if it is truly free, affords not only free entry but free exit as well. And competition, if it means anything, means that all the parties to it are equally at liberty to choose which markets they will serve and which they won't. In principle, it would relieve common carriers from the obligation to tariff services that they offer in competition with others and it would relieve them of the obligation to assure the availability of those services to all comers. In short, it would destroy the common carrier principle and the commitment to public service it engenders.

I doubt that there is anyone in this room who thinks that's going to happen or that it will be permitted to happen. But the consequences to the public could be quite as drastic if in pursuit of ad hoc solutions we seek to accommodate ourselves to opposing principles without rigorously thinking through to the long-term outcome of doing so.

I suggest that the time for that thinking-through is now and that it is time, too, that the public be made a party to it.

Now I am sure this audience—more clearly than any other I can think of—recognizes that a decision such as ours—to take to the public the case for the common carrier principle and thereby by implication to oppose competition, espouse monopoly—is not taken lightly. Particularly is it not taken lightly in a company it's no secret is the world's largest. I want you to know that we have thought about the risks.

It will be alleged—indeed it has been—that it is not the public interest but our own that motivates our stand, that our purposes, however, idealistic a face we might seek to put on it, is simply to protect our markets and the profits that derive from them.

To that charge, I have but one rejoinder: ours is a business that seeks profit only to serve. I don't expect our would-be competitors to believe that. And in this day of widespread skepticism about the motives of large institutions, it would probably be unrealistic to expect many among the public to believe it either. Perhaps you don't. But, as I've said many times to our own managers, the day that we ourselves stop believing it will be the day when we'll begin to lose—and deserve to lose—the opportunities that go along with the great responsibilities the public has entrusted to us.

Moreover, I would point out that Walter Gifford, when he appeared before this convention 45 years ago, stated it to be a fundamental precept of our business

that profits beyond those required to provide service should be returned to the customer in the form of lower rates or improvements in facilities or both. We have done our best to live by that precept ever since—with, I should observe, more than a little help from you.

By nothing I've said do I mean to imply that telephone people are better or worse than anybody else. What I do claim is that there is a perhaps unique dynamics at work in our enterprise that compels its managers to conform their aims to public expectations. In some measure, the unusual obligation we have taken upon ourselves is simply a human response to the unusual trust that has been placed in us. At the same time, it would be unrealistic to deny that it derives in some measure, too, from the fact that we are regulated and our recognition that, because we are, retaining the right to manage and the satisfactions that come from exercising our own initiatives, depends on perceiving—and doing—what is right before regulation tells us to. In any case, I think you will be ready to grant that our business did not grow to be almost a hundred years old by pursuing interests at odds with those of the public it exists to serve.

I would, then, simply ask this question: who among the parties at issue on these matters—the hardware manufacturers—the large users, the purveyors of selective intercity services—does self-interest compel to speak for the interest of the public at large, the average customer? Who if not we?

We recognize, of course, that the world of telecommunications is not "ours" and that today there are a great many organizations beside our own whose talents could effectively be brought to bear on the growth and improvement of the nationwide telephone network. Our aim is to expand and not restrict their opportunities to do so. To that end we are looking for ways by which we in the Bell System might broaden the base of participation in the task of supplying the facilities for a constantly growing, constantly changing network. The Western Electric Company is a great outfit and, I am sure, determined to retain its leadership in the production of communications facilities of advanced design. But to be best where it counts most Western Electric can't be best in everything. Nor does it seek to be. In 1972, for example, Western Electric provided about \$500 million of telecommunications products—switching equipment, wire and cable, carrier and microwave equipment—which it had purchased from others on behalf of the Bell telephone companies—and the telephone companies themselves bought some \$200 to \$300 million more directly from outside suppliers. I anticipate that in the years ahead the job of supplying the network will be even more broadly shared and that increasingly suppliers outside our business who are ready, willing and able to fulfill the rigorous standards of performance that quality service demands will be helping to build the telecommunications network of tomorrow.

There is another risk we run in taking our stand against a further extension of selective competition in telecommunications and that is the risk of appearing to have set ourselves against change, of clinging to the past against the discomfitures of an uncertain future.

But I submit—indeed I would insist—that not all we've inherited from the past is bad. It is in fact my own conviction that our is—and has been for a very long time—a business ahead of its time and not behind it. This is a conviction, by the way, in which I am not alone. Increasingly, the Bell System with its integrated structure and its disciplined approach to the utilization of resources is being cited by serious students of economic organizations as a prototype for the organization of a wide range of industrial and social undertakings crucial to the nation's well-being, a forerunner of the kind of enterprise—performance-oriented rather than product-oriented—it will take to bring technology fully to bear on the service of man.

Increasingly, too, telecommunications authorities in other countries are seeking our advice with a view to restructuring their systems to match ours—and without exception, they encourage us to oppose the erosion of end-to-end responsibility, an erosion that experience has taught them is wrong.

So it is the future, not the past, that dictates our stand in opposition to a further fragmentation of communications. For the future insofar as we can see it is one in which, confronting increasing complexity, we shall require more rather than less coordination to control it. More rather than less, product and process engineering will become indistinguishable, requiring a more and more disciplined integration of the functions involved in translating science into serv-

ice. And more rather than less, *the dramatic opportunities now under development—the millimeter waveguide and, beyond it, optical transmission—call for aggregations of demand* that, if compromised, could significantly delay their introduction. Against these prospects, fragmentation of the communications market, we are convinced, would represent a serious retrogression for which our posterity will pay not only in terms of higher costs for disordered service but also in terms of opportunities deferred.

Who then speaks for the future?

It is not to oppose change that we suggest that we at least know where it is taking us before we embrace it. Indeed, I recognize that the very convictions I've expressed here today, should they prevail, will themselves call for change. For example, *I never thought I would hear myself calling for more regulation rather than less. But if that is the price of confirmation of the common carrier principle and the concentration of responsibility that goes with it, that to me is a price we ought to pay.* Indeed, I would invite explicit regulation of any aspect of our business where the public might require additional reassurance that its interest are being fairly and objectively served.

There is a final risk we run in urging a re-examination of current trends in regulatory policy—and that is that the convictions I have expressed here may not prevail. Realism suggests that in every particular they won't. But, having convictions, we are ready to test them against the convictions of others in the hope that the outcome, while it might not meet the perfect satisfaction of anybody, will prove in the long run best for everybody.

On a good many occasions I have said that our business exists for no other reason than for the service it provides the public and that therefore our responsibility to investors places no greater obligation on us than doing the very best service job for the public—the entire public—that we know how to do. *Regulation's obligation, too, is to the entire public. It is this shared obligation—yours and ours—that has prompted me today to speak out—and to urge you to speak out—against trends that unless we call a halt to them, could slowly sabotage the very policies on which our ability to fulfill that obligation is based.*

This nation owes much, I think, to the men who long ago shaped the regulatory principles on which the communications industry has grown down through the years. We have an obligation, I suggest, to do what we can to assure that tomorrow's public, looking back to our times, will feel itself as well served.

Exhibit 10 (Omitted.)

EXHIBIT 11

PROSPECTUS

10,000,000 Shares
American Telephone and Telegraph Company
\$3.64 PREFERRED SHARES
 (Stated Value \$50 Per Share)

Dividends cumulative from April 12, 1973 are payable quarterly on February 1, May 1, August 1 and November 1 commencing August 1, 1973.

Redeemable on at least 30 days' notice (a) at the option of the Company, as a whole or in part at any time, at \$53.61 a share on or prior to April 30, 1974, and at decreasing prices thereafter to and including April 30, 2008 and thereafter at \$50 per share and (b) through operation of the sinking fund at \$50 per share, together in each case with accrued dividends; provided, however, that shares may not be redeemed prior to May 1, 1983 through certain refunding operations at a cost of less than 7.35% per annum.

As a sinking fund the Company on May 1 of each year beginning with 1984 will redeem \$500,000 Preferred Shares. The Company may credit against the sinking fund shares purchased or optionally redeemed and has the noncumulative right to increase the number of shares to be redeemed for the sinking fund on any May 1 by an amount not exceeding 500,000 shares.

Application has been made to list the Preferred Shares on the New York Stock Exchange.

THESE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE SECURITIES AND EXCHANGE COMMISSION NOR HAS THE COMMISSION PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

PRICE \$50 A SHARE AND ACCRUED DIVIDENDS

	<u>Price to Public(1)</u>	<u>Underwriting Commissions(2)</u>	<u>Proceeds to Company(1)(3)</u>
Per Share.....	\$50.00	\$.55	\$49.45
Total.....	\$500,000,000	\$5,500,000	\$494,500,000

(1) Plus accrued dividends from April 12, 1973.

(2) Includes fees in respect of Preferred Shares sold pursuant to Delayed Delivery Contracts referred to herein.

(3) Before deducting other expenses estimated at \$570,000 payable by the Company.

Preferred Shares are offered by the several Underwriters named herein, subject to prior sale, when, as and if accepted by the Underwriters, and subject to approval of certain legal matters by Davis Polk & Wardwell, counsel for the Underwriters. It is expected that delivery of the certificates for such Preferred Shares will be made on or about April 12, 1973 at the office of Morgan Guaranty Trust Company of New York, 23 Wall Street, New York, N. Y., against payment therefor in New York funds.

In addition, Preferred Shares are being offered to certain institutions through the several Underwriters for delivery on July 10, 1973 pursuant to Delayed Delivery Contracts with the Company. See "Delayed Delivery Arrangements" herein.

MORGAN STANLEY & CO.
Incorporated

GOLDMAN, SACHS & CO.

KIDDER, PEABODY & CO.
Incorporated

WHITE, WELD & CO.
Incorporated

March 27, 1973.

a return must be earned. Such increased expenses and the increased investment in plant, coupled with today's high cost of capital, have given rise to the need for substantial increases in both interstate and intrastate rates.

In recent years in a few large metropolitan areas demand for telephone service temporarily outpaced ability to provide facilities. As a result, there was severe criticism in the press in certain areas and in several cases regulatory authorities referred to service difficulties as a negative factor for consideration in establishing the allowable rate of return. However, service standards are being met in most areas served by the Bell System throughout the United States and service is improving in the few areas where difficulties still exist.

Manufacturing and Supply Facilities

The principal business of Western Electric, a wholly-owned subsidiary of the American Company, is manufacturing communications apparatus and equipment and cable for the Bell System telephone companies, procuring and selling to such companies supplies not of its own manufacture and installing central office equipment for such companies, all pursuant to Standard Supply Contracts described under "Certain Contracts". Western Electric also does a large amount of work for the Government, principally in connection with defense activities. Western Electric has a number of subsidiaries, including Teletype Corporation which manufactures teletypewriter and data transmission equipment.

In recent years Western Electric has carried out an extensive program of construction of new plant and additions and improvements to existing plant. In this connection it has substantially increased and expects to continue to increase its capital. At December 31, 1972 it had equity capital of \$2,905,048,000 and long term debt of \$725,000,000 as compared with equity capital of \$1,656,383,000 and long term debt of \$470,000,000 at December 31, 1967.

In 1972 the sales of Western Electric and its subsidiaries amounted to approximately \$6,551,183,000 of which about 83% was to the American Company and its consolidated subsidiaries, and the remainder was principally in connection with business for the United States Government.

Research, Development and Technological Change

Bell Laboratories, owned half by the American Company and half by Western Electric, conducts scientific research, development and design work for the Bell System. In 1972 Bell Laboratories expended \$149,000,000 for basic research and fundamental development for the American Company and \$232,000,000 for specific development and design work related to Bell System products to be supplied by Western Electric. In addition, Bell Laboratories does a substantial amount of work for Western Electric relating to government contracts.

Bell Laboratories has made significant contributions to communications technology over the years, including invention of the transistor, development of Touch-Tone® signaling and major contributions in the fields of integrated circuits and laser technology. Examples of current areas in which Bell Laboratories engages in research and development work for the Bell System are the continuing improvement of electronic switching systems ("ESS") and the development of new switching technology. Electronic switching systems provide faster call processing, increased reliability and reduced maintenance costs. At the end of 1972 over 320

® Denotes registered service mark of the American Company.

For many years the American Company has been accepting payment from the Licensees on the basis of 1% of gross earnings (total operating revenues other than miscellaneous), which is less than the rate stated in the contracts.

Supplementary agreements cover the sharing of revenues derived by the American Company and the other companies of the Bell System from interstate and foreign services. These agreements provide in effect that from the total of these revenues the various companies will be reimbursed for expenses (including taxes) incurred in furnishing the services, and that the remainder will be apportioned among the companies upon the basis of the property which each devotes to the furnishing of such services.

Standard Supply Contracts

The American Company and each of the companies with which it has License Contracts have long had agreements known as "Standard Supply Contracts" with Western Electric under which Western Electric agrees, to the extent reasonably required for the company's business, to manufacture materials or purchase materials manufactured by others, to sell such materials to the company, to maintain stocks at distributing points, to prepare equipment specifications, to perform installations of materials and to repair or dispose of used materials returned by the company. Western Electric's prices and terms are to be as low as to its most favored customers for like materials and services under comparable conditions. Each agreement continues until terminated by one

phone and Telegraph Company, Pacific Northwest Bell Telephone Company, The Mountain States Telephone and Telegraph Company and New England Telephone and Telegraph Company) and certain shareholders of a telephone company in which the American Company itself owns only a minority interest instituted actions which are pending in both federal and state courts*, purportedly on behalf of the respective telephone companies, against the American Company and Western Electric. It is alleged in each action that the prices that have been charged by Western Electric to the telephone company under its Standard Supply Contract and the fees that have been charged by the American Company to the telephone company under its License Contract have been excessive. In addition, in a number of the actions it is alleged that the telephone company has been unfairly deprived of revenues under the supplementary agreement between the Bell System telephone companies covering the sharing of interstate and foreign service revenues. Substantial damages are sought against the American Company and Western Electric at common law and also, in the federal court actions, under the antitrust laws, with the amount of damages under the antitrust laws to be trebled. A number of the actions also specifically seek rescission of the License Contract and the Standard Supply Contract of the telephone company involved. The American Company considers the actions to be without merit. Court proceedings relating to a proposed settlement of these suits have been initiated. The proposed settlement would not affect the Contracts or the basic relationships between the Bell System companies.

* *Harris J. Simonson, et al. (Consolidated Action, 64 Civ. 1838) v. American Telephone and Telegraph Company, et al.—United States District Court, Southern District of New York; Harris J. Simonson, et al. (Consolidated Action, Index No. 9219/66), Avnet, et al., and Jaffe, et al., each v. American Telephone and Telegraph Company, et al.—Supreme Court, New York County, New York.*

Exhibit 12

BETTER BEND THAN BREAK

[REMARKS OF PAUL H. HENSON, CHAIRMAN, UNITED TELECOMMUNICATIONS, INC., AT THE NATIONAL CONVENTION OF THE U. S. INDEPENDENT TELEPHONE ASSOCIATION.]

Ladies and Gentlemen: In past years the American telephone industry and its suppliers, assisted by generally progressive, forward-looking regulation, have worked together to build the world's finest, most dependable telecommunications complex which serves virtually every corner of our great nation.

Traditionally, manufacturers and regulated utility entrepreneurs were privileged and even encouraged to pursue profitable opportunities as they appeared. In the process, new products, services and conveniences were developed, and, by and large, the public has been well served.

Now, however, we have entered into a new era of great social and economic change, compounded by a general mistrust of our elected and appointed governmental figures and, indeed, of anything which smacks of being a part of "The Establishment."

I can think of no institution which in the past decade has escaped the pressures for drastic change which have come from dedicated consumerists and ambitious politicians. The telephone industry has received its share of the pressures. Viewed in the context of our long track record, the telephone industry has demonstrated that it is willing to initiate change as long as the greatest benefits from change accrue to the greatest number of consumers.

Therein lies the problem. That which is good for most of our customers is seldom perfect for all of our customers.

In his newsletter entitled "anaging the Human Climate," Philip Lesly writes, "It is a distinctly American delusion that anything that's not perfect is somebody's fault and must be set right by forced directive. Miracles' have become so commonplace—from miracle drugs to constantly surpassed sports records—that it's presumed the only limit to achievement is someone's greed or recalcitrance. The result is accelerated demands for forced programs to achieve arbitrary goals without much consideration either for whether they can be attained or for what is likely to really happen if they are."

We in the telecommunications business, and especially those who regulate our business, have been inundated by demands for revolutionary changes of one kind or another. Significantly, some of the most vocal demands—which often are conflicting—have come from relatively small categories of customers who are not content with evolutionary changes which benefit only the majority. Small or not, however, their influence is being felt—but not in a manner which benefits others or, perhaps, even themselves.

As a result, there is an air of uncertainty in our industry where once there was confidence. The former urge to be progressive and innovative is being replaced, I fear, by a desire to cling to the status quo. Telephone managers, suppliers, yes, and even regulators who formerly were action-minded are being forced to think defensively and proceed slowly, if at all, in implementing their plans for the future.

With every thought and every proposal for new policy or action, these people must hesitate and must ponder such questions as: Who might object? What protests, lawsuits and injunctions with this new action engender? At what cost? With what delays? And with what effect on the long-term survival of individual organizations and industries as a whole? In short, avoidance of trouble has become more important than imagination.

If satisfactory answers cannot be found to questions like these, it is little wonder that the path of least resistance is followed and that the selected choice of action is to make no changes at all. My point is simply this: with too many factions taking too many opposing, unalterable stands, our industry is forced to opt for long-term protection rather than early accomplishment.

The dynamism for expansion and improvement which once characterized the telephone business is being replaced by the dead hand of caution. I submit that disunity within our industry is one of the reasons for low price/earnings multiples on most telephone equities. If operating companies and their suppliers

are confused, if competitors are abusive, if regulators are hesitant, how can we expect investors to be enthusiastic about our future prospects?

This is not to say that our industry and its aspirations are going irretrievably down the drain. Rather, it just isn't going any place at all, not until compromise and cooperation replace the current regulatory standoff on state and federal rights and not until the telephone industry is willing to reevaluate its many and diverse positions on interconnection, specialized common carriers, domestic satellites, pricing of services—both competitive and non-competitive—and other matters of current concern.

John D. deButts, board chairman of American Telephone and Telegraph Company, laid it squarely on the line last month when he addressed the National Association of Regulatory Commissioners at their convention in Seattle. "The time has come," he said, "for a thorough thinking-through of the future of telecommunications in this country—a thinking-through sufficiently objective as to at least admit the possibility that there may be sectors of our economy—and telecommunications is one of them—where the nation is better served by modes of cooperation than by modes of competition, by working together rather than by working at odds."

In echoing Mr. deButts' words, I would add that, in my opinion, we can serve our nation best by serving, first, our own industry through the kind of cooperation and adaptability that can get it moving again.

The matter of interconnection is a case in point. I confess to having been as adamantly opposed to interconnect as anybody in the telephone business during and immediately following the Carterfone hearings. I made speeches and I wrote articles deploring the fact that customer-owned terminal equipment might harm the network, that the responsibility for service would be divided and not clearly assignable, and that revenues lost through serving interconnect customers would have to be recovered from non-interconnect customers.

But we lost that ball game! It makes no difference now whether we were right or wrong in our initial stand. What matters, in this World Series of the interconnection game, is that the interconnect industry has won the first three games and can close out the Series with one more win.

I don't propose that we concede the equivalent of the final game. I do submit that it is necessary to delay the Series until the umpires can agree on the ground rules. However, even if we win the next four straight games in the resumed Series, we can't expect the interconnect industry to be ruled out of any future contests.

On the contrary, it is time, I believe, for the telephone industry to accept the fact that interconnection, some forms of which have been in existence for 40 years or more, is here to stay. Having been created by regulatory and judicial decisions, the interconnect business is clearly legitimized but yet to be defined. It is legal, proper and potentially profitable.

I submit, however, that it does not represent the death knell of the telephone industry. Rather, the telephone industry need lose no more of the terminal equipment market than it deserves—or feels it can afford—to lose. Again quoting Mr. deButts' Seattle speech, "Competition means freedom to leave as well as enter a market."

I find it reassuring to observe that the world's largest telephone system, the one with the renowned research laboratories is now marketing a new line of PBX's with the flexibility of features and prices heretofore unavailable to that company's customers except from interconnect vendors.

It helps to restore one's faith in the American system of competitive enterprise—and to demonstrate the infirmities of the argument that even limited competition in the telephone business is contrary to the public interest. It also raises the question as to who benefits from delaying the introduction of new products with such flexibility until competitive pressures force the retirement of old product lines.

The telephone industry has had a paranoid attitude about any form of competition since the days of Theodore Vail and his unsuccessful attempts to monopolize all transmission of intelligence by electrical means. Many of us came into the business in the '30s and '40s and it is therefore no wonder that we are really monopolists at heart, albeit benign and, hopefully, benevolent.

I say this because we were convinced—and rightly so—that the public communications system of this country could only be managed in the public in-

terest by well-coordinated and integrated organizations with common objectives, if not common ownership.

I concede that this nation's public communications system never could have reached its present state of proficiency without being managed by the kind of coordinated and integrated organizations we have had. However, we no longer are a fledgling industry. The industry is composed of an important group of companies, providing vital services, and our combined construction budgets consume a significant portion of the nation's available investment capital.

There is no competition in sight that threatens the continued viability of our basic transmission and switching business or the direction it will take in the years to come. What competition we have is the equivalent of the diminutive nose of a small camel in a very large tent. With the traditional American penchant for rooting for the little guy, I doubt that we can convince many regulators—or the public—that we need protection.

I agree that competition in providing telephone terminal equipment must be free competition with the same rules applying to all competitors. Given these conditions, I am confident that all telephone companies can give a good account of themselves. But supposing my company competes to the best of its ability, and my customer, for reasons of his own, still obtains his PBX switchboard from an interconnect vendor. What am I going to do about it? Squabble with my customer? Make him angry with me? Be uncooperative to the extent that his service is impaired? No, I'm not going to do any of these things. I'm going to bend a little, because I'm in business to make a profit. *He's still my telephone customer!* I need his goodwill in order to co-exist and to service his other communications requirements that are profitable to me.

They are profitable to me, that is, if I have priced them right—and that brings us to another matter which requires industrywide input and regulatory cooperations.

Since the beginning of exchange and long distance services, vertical and toll service charges have—more or less—subsidized local exchange rates in order that the benefits and conveniences of telephone service could be extended to a greater number of customers. Further, on the valid theory that the benefits and conveniences of telephone service were of greater monetary value to business customers than to residence customers, the industry traditionally has charged its business customers more for local service. At the same time, we have tried to make certain that rural customers pay no more than urban customers for acceptable grades of local service.

This "value of service" concept of pricing, possibly only within a natural monopoly industry, has served the nation and the telephone industry well, and it has been a relatively easy system to regulate. As long as rates for primary service were weighted in a traditional manner and as long as a composite rate of return fell within time-honored parameters, nobody was overly concerned with the rates for other services. In fact, we in the telephone business have not known with certainty how much profit—or loss—we experience on some services, nor have we cared, as long as our overall return on rate base has seemed fair.

Now, however, the introduction of direct competition in some areas of our business has made it imperative that we know the relevant costs associated with *all* areas of our business, especially since many academicians and some regulations are saying that present prices for various classes and grades of non-competitive telephone service and certain supplemental services are discriminatory and should be adjusted to reflect more directly the telephone companies' costs of providing such services.

Please note that I used the term "relevant" costs associated with all areas of our business. I will try to use that term consistently throughout this discussion, not wishing to attempt to prejudge the great economic debate that is going on about the use of "incremental" vis-a-vis "fully allocated" costs in the pricing of competitive services. For the purposes of this discussion, relevant costs are costs as costs are ultimately defined.

Ideologically, converting to a cost-related pricing system is not objectionable, but it is obvious that the telephone industry is going to be forced to devote much time and effort to determining what its relevant costs are and what the appropriate rates of return on increments of the business should be.

The development of such cost studies is going to increase our costs of doing business, and we don't know in advance whether knowing relevant costs

is going to save us money or lose us money. Moreover, there are so many different kinds of costs—fixed, variable, peak, off-peak, marginal—to mention a few—and so many different methods of determining them that it would not be inconceivable for 1,600 telephone companies to develop a bewildering multiplicity of controversial procedures.

In an effort to establish a semblance of uniformity, the United States Independent Telephone Association has formed a Subcommittee on Cost Analysis. Under the direction of the Separations and Settlements Committee, the subcommittee is developing suggested methods and procedures which will help telephone companies to identify the costs related to various services to the end that telephone companies will be in a position to evaluate existing and future pricing practices.

Consequently, I submit that now is the appropriate time for our entire industry, working closely with a national task force of regulatory commissioners and staff members, to participate in an interchange of information leading to the establishment of uniform guidelines for determining costs necessary to support pricing decisions.

Please understand that I am not advocating complete abandonment of the value of service pricing concept. On the contrary, I am convinced that a pricing system based exclusively on cost of service principles would be unwieldy and impractical. If we are to fulfill the charge of the Communications Act, value of service factors must continue to be a part of the pricing equation. However, the expert judgment required to formulate prices on a value of service basis requires the support of factual information from relevant cost studies. I see no practical alternative. In fact, the telephone industry—and its regulatory bodies—could make some serious mistakes by adopting new pricing policies with respect to certain, specific services without a clear notion of their ramifications.

The pricing of private line interexchange services is a good example. Hi-lo interchange tariffs for private line services have been filed to permit the telephone industry to compete with specialized common carriers on high density routes. It is certain that we will have to prove our relevant costs of providing such services and disprove the presumption by some that the telephone industry utilizes message toll telephone rates to subsidize private line rates.

It should not be too difficult to prove that the telephone industry can offer competitively priced private line services between major population centers if we go to point-to-point costing and pricing. However, if the industry is forced to utilize extensive route costing and pricing, the historical policy of nationwide rate schedules based on average costs will have to be abandoned. Such action will, in turn, raise the rates between the smaller communities to their serious economic disadvantage. Where does pricing based on relevant costs end and where does value of service pricing based on social and economic objectives take over?

I am not going to argue the merits or demerits of the landmark MCI decision at this late date. Again, we lost all the ball games that have thus far been played in this "Series." However, I submit that we are talking about a new ball game when the "experiment" envisioned in the MCI decision has now been expanded to include some twenty systems that have been authorized in whole or in part. That is quite an experiment!

Perhaps an experiment of even these proportions could be justified if free and fair competition were permitted to exist. Those who were but recently extolling the virtues of intercity competition now seem intent on preventing the telephone industry from restructuring their tariffs so as to be able to compete.

The philosophical switch from competition to protectionism is evident in the obstructionist tactics of the specialized common carriers. An overzealousness on the part of some regulators in verifying that subsidies are not involved may result in abuse of the regulatory process and unduly delay the telephone industry in its efforts to meet—not undercut—the new intercity competition.

The Justice Department is more direct when they decide to oppose us. In the mobile radio proceedings, the Justice Department simply proposed that the telephone industry be excluded from competitive markets. Well, at least we know where they stand.

As if the problems confronting the industry in interconnection practices, pricing policies and intercity competition were not enough, now we have an

industry confrontation brewing in domestic satellites. As you know, the FCC opted for an "open skies" policy in the licensing of domestic satellites and essentially proclaimed "the more the merrier." In spite of some arbitrary handicapping of the common carrier entrants in the race, I, for one, think it was a good decision. Not all do.

To say that our industry has served the public well by growing up as it has is not to say that the public might not be served better, hereafter, by making some changes. To say that a long-haul network should be operated under unified direction does not say that single ownership of all the facilities which form that network is essential. Indeed, we know it is not, for many segments of that network are today owned by Independent companies.

Cooperation in the management of the long-haul network takes place today among Bell-owned companies and, to a lesser extent, between Bell and Independent companies—"lesser," I say, because of a reluctance to admit to the realities of our participation more than due to any unwillingness or inability to cooperate.

Because of their very nature, satellite facilities, I submit, offer a unique opportunity to introduce participative ownership in the nationwide switched network. I further submit that such participative ownership is the best long-term interests of the entire telephone industry.

Perhaps if the Independents had been encouraged to share in the ownership and operation of the present long lines network we would not have some of the problems, some of the illogical competition and some of the regulatory constraints that we have today.

I am quite aware that these are controversial issues, that complete unanimity of opinion for or against them is unlikely ever to be achieved among telephone companies, customers, interconnect suppliers, specialized common carriers and regulators.

Some of us see no reason to relinquish old concepts, especially if we are uncertain about the economic and operational impact that will come with the adoption of new ones. At the other extreme, some of us are so eager to change to new concepts that there is a danger of throwing out the baby with the bathwater.

There is an old Scottish proverb to the effect that it is "better to bend than break." I think it applies very well to the situation in which the American telephone industry—and all of those vitally concerned with the people it serves—can be found today.

If we devote ourselves to endless and unavailing argument and philosophical discussion on these controversial issues—if there is unalterable polarization on these issues with no seeking of a middle ground where the public interest can be well served—if there isn't some bending done—something is going to break, and it could well be the spirit of cooperation and partnership that has given our nation, to date, the world's greatest telecommunications system.

For it is my concern that the world's greatest telecommunications system is threatened more by other forces than it will ever be by a limited amount of regulated competition. There are those in government and academic circles that seem determined to dismantle and fragment the telephone industry simply because the industry is "big" and because it is "concentrated."

Perhaps those of you who followed the hearings before the Senate Judiciary Antitrust and Monopoly Subcommittee chaired by Senator Hart earlier this year share my concern. Most of the carefully screened witnesses testified to the effect that size is a sin and vertical integration is a cardinal sin. They advanced the contention that the Bell System's size and economic impact permit it to carry on anticompetitive practices against interconnect producers and suppliers, specialized common carriers and radio common carriers. To a majority of the witnesses, the solution was the complete dismantling of the Bell System.

Our colleague Bill Corman summarized these allegations and the proposed solution in his answer to the query: "Would the public be better served if Bell did not occupy such a position?" Bill's response: "One answer is to try it and see what happens. However, I feel that such an answer has many of the attributes of Russian roulette."

I agree with Bill Corman's analogy but I believe the odds are a lot shorter than the theoretical five to one. If the political and economic planners are going to dismantle the Bell System, the major Independent entities are next in line. I can only conclude that such a restructuring would relegate America's telecommunications network to second-class status in a short period of time.

Without the technical and operational leadership of the Bell System, which is made possible only by the combination of all their various resources and capabilities, all telephone operating companies and all telephone suppliers would be severely handicapped. The reorganization of the telephone industry, as envisioned by Senator Hart and his followers, would succeed in ending this country's world leadership in telecommunications. Because unified direction is a requirement, the only answer then would be nationalization of the industry.

We have a lot of detractors these days and we are going to strengthen their hands if we persist in spending an inordinate amount of scarce management and regulatory time and talent on our competitive services which are a relatively small part of our business. Let's get together, then, to compromise our differences.

With the public interest as our criterion, let us decide which of the old ways of doing business still are valid for this day and age and which ones should be modified to meet the public needs of today and tomorrow. Instead of adopting an inflexible attitude about competition of any kind, let's look for ways to accommodate competition in the public interest.

Finally, while there is no wrong time to do a right thing, let us remember that it is wrong to kill time when we can employ it instead. That's an old Swedish proverb that I just authored to emphasize the need for immediate action if we are to avoid the consequences of being inflexible.

Let's all bend a little.

Exhibit 13

FEDERAL COMMUNICATIONS COMMISSION,
Washington, D.C., October 19, 1970.

[Public Notice]

(Remarks by Commissioner Nicholas Johnson, Federal Communications Commission, prepared for delivery to the Digitronics Users Association Conference, Hotel Ambassador, Chicago, Illinois, Monday, October 19, 1970)

WHY I AM A CONSERVATIVE OR FOR WHOM DOES BELL TOIL?

You may be wondering why a conservative like I would have so much trouble with the telephone company. Well, let me tell you.

Now that Vice President Agnew has spilled the beans, and all the world knows that I have been just a "super permissive government official" all along, I might as well confess.

The Vice President's right. It is no coincidence that I should come to Chicago to speak on economic issues. The fact is that I have picked up a great deal of my economic philosophy right here. Milton Friedman and his colleagues have made a believer out of me.

It hasn't been easy. There aren't many genuine conservatives left—especially in Washington. And when folks found that I was getting some of my regulatory philosophy from Barry Goldwater's economic advisor I knew I would have to pay the price of trade press ridicule and industry suspicion.

In fact, I have spent most of my career as a government official—first as Maritime Administrator and now as an FCC Commissioner—unsuccessfully preaching the doctrine of free private enterprise competition and less government regulation to reluctant American businessmen committed to socialized enterprise and government protection of monopoly.

I didn't believe in socializing and subsidizing the American merchant marine and shipyards. I felt that with the genius of American management, we ought to be able to win in world-wide competition—as the American computer and industrial machinery companies have done. I wanted less government involvement in shipping—the industry wanted more regulation and socialization. Now it has won out, as you may know. President Nixon's proposals for dramatic increases in maritime subsidies have been approved—notwithstanding the fact that almost every independent economist in the country argues there is absolutely no commensurate economic benefit whatsoever from this expenditure of tax dollars.

Why is it that principles of competition sound so good at Rotary and so frightening when competitors threaten to move in next door?

If the best products are to win out in the market place, if the theory is to work in practice, there must be informed consumers. Why is it that consumer product industries almost universally resist efforts to provide relevant information about their products in advertising, packaging and prices that make comparisons easier?

If there is to be competition there must be competitors. Why is it that an industry run by men like America's newspaper executives—whose editorial commitment to free enterprise is unmatched—are distressed that only 94% of the cities with daily newspapers have monopolies? Why is it they feel compelled to press for a newspaper monopoly authorization bill (Administration-backed—over the protests of the Assistant Attorney General for Antitrust) in order to further reduce competition in their business?

You get the idea. In general, you see, my problem involves the distinction between the articulation of a theory and its application in practice. It's the carrying of a conservative philosophy like private enterprise to its logical conclusion that gets me in trouble.

My problems are only rendered more extreme by the integration of my conservative economics into my conservative politics.

My politics are equally old-fashioned. They are based on an American theory developed by a 200-year-old landed aristocrat named Thomas Jefferson: democracy. He believed that the best government would come from an educated and informed people participating in the decisions that affect their daily lives. Hardly anybody believes in this conservative doctrine anymore.

It's kind of a lonely crusade I wage. For example, I felt that local citizens should participate more actively in the license renewal process of their local radio and television stations. This was preferable, in my judgment, to regulation by the federal government in Washington. I admit this sounds sort of like a George Wallace position. And I suppose I shouldn't have been surprised that those Radic-Libs who control the broadcasting industry—and therefore the Congress, Administration, and FCC—wouldn't see it my way. But I was a little saddened.

And so it goes. The life of a conservative is hard.

The purpose of this long introduction has been to make it easier for you to understand the problems I've had with the telephone company.

You all recall the telephone company. You have to recall the telephone company. You lose your dime on the first try.

Well, a part of my responsibility as an FCC Commissioner is to see to it that the Bell System serves the public interest, convenience and necessity.

That it is a necessity no one doubts.

Just how convenient it is raises other issues.

As for the public interest, that seems to have been forgotten.

I used to talk and write about the public interest in telephone matters a lot: lower rates, more flexible services, optimal rates of technological growth and plant expansion, and so forth—you know the litany. Well, I've stopped. It's not that I'm not interested, you understand. It's just that it's not working. It's kind of like falling in love by yourself. It's a beautiful trip, but it's kind of lonely.

So I've decided to talk about Bell's interests. That seems to be what most of the people who come to the FCC these days are talking about. It's a tougher ball game to play, but that just makes it more of a challenge. And at least you're not talking to yourself.

You can imagine my surprise, as I got into the subject, to discover that Bell management has been urging policies that don't even serve the company's interests. I mean, I could understand how Bell's pursuit of its own interests would not always serve the public interest. That probability was, after all, the original reason for regulation. But why would Bell deliberately adopt policies that simultaneously produce (a) higher prices and worse service for the public, and also (b) lower profits for its shareholders? That I just couldn't understand. But the evidence was clear that higher prices, lower quality services, and lower profits had been the result of a number of Bell management's policies. It was then that it dawned on me: perhaps if I could present my case for public service from Bell in terms of Bell's own profit picture I might at least get the ear of some of the company's policy makers for a moment. And so I continued my research into the uncharted wilderness on the way to higher

profits for Bell. What I have to report today are the results of preliminary investigation. But I thought it might be of interest to you.

There are, as always, a few basic assumptions. I assume that lower costs, and higher revenue from increased communications use and improved technology are in the private interests of the company. I also assume some regulatory lag—that is, that the company is allowed to keep a certain amount of windfall profits (from reduced costs or increased revenues) before the FCC and state commissions catch up with extravagant rates of return.

There are three basic areas where I believe the Bell System has not served its own interests—what I will call financial operations, promotion of service and technological improvements.

FINANCIAL

Debt-equity structure.—A big company like Bell needs capital. Lots of it. Last year it went to the market for a total of roughly \$2 billion in external financing. A few percentage points can make a big difference—especially if you're a shareholder. But basically, anytime you're a shareholder in a company

cost in making the asset, and automatically contributing to the cost of whatever the company makes above its costs. The more cheap money the company can borrow the richer you get. That's how the electric utilities rated A and B, with an average rate of return of 6.6% in 1968, earned for shareholders an average of 12.3% on equity. Bell, by contrast, while earning 7½% on its investment earned for shareholders only 9.3%. It's a dramatic and shocking contrast, but true.

Only under intense questioning during the 1967 FCC hearings did Bell management finally concede the error of its ways over to these many years. So long as the interest rates Bell must pay for debt are lower than the total rate of return it must pay on equity (which is virtually always the case), it is in Bell's interest to borrow rather than sell stock.¹ But it is a bit ironic and tragically costly for everyone involved that Bell is only now going to more debt financing—when it has to pay some of the highest interest rates in our nation's history (8½ to 9%)—and that it failed to borrow more during all those years when it could have borrowed in the 2% to 4% range.

Needless to say, the public has also been grossly disserved by Bell's financial policies. Every dollar raised through equity rather than debt can cost the consumer five times as much. But so long as our principal focus is on the shareholder's interests we needn't dwell on the public interest aspect of Bell's folly.

Stock options and stock financing.—As a part of the Bell miscalculation on debt-equity ratio, there was for some time a rather extensive program of stock options for employees. This program has now ended, but its effect was significantly to dilute ATT stock—with a rather meager return in terms of financing and employee incentives. It was nice for management and employees—but mighty costly for shareholders.

There are two other matters which still may be considered in the FCC's lagging, five-year-old investigation of Bell's rates and services. I will express no final position before examining the full record. But I think there is significant evidence for the following two propositions.

Accelerated depreciation.—You don't have to know very much accounting to know about depreciation—the annual “cost” of your plant wearing out. But when your plant is worth \$41 billion, like Bell's is, how that depreciation is handled by the accountants can make a big difference in your costs, your taxes, your regulated rate of return, and your shareholders' profits. Now there are a lot of inequities in the tax code favoring the corporations and the rich. I think many of them ought to be changed. But I'd agree with Milton Friedman that, as long as they're there, management's role is to minimize its company's tax burden—not to make social policy judgments that the government might put the

¹ I am assuming Bell's current debt-equity ratio. There would, of course, come a point when additional debt might pose financial risk. Most economists agree, however, that Bell is still a long way from that point.

money to better use than the shareholders. Since the 1954 Internal Revenue Code took effect Bell has been permitted to use "accelerated depreciation"—that is, to charge off as a tax deductible business expense more depreciation than was formerly permitted. Instead of figuring its federal taxes based on accelerated depreciation, however, Bell continued to use "straight line" (normal) depreciation. As a result the potential tax savings—at least millions and perhaps billions of dollars—have been lost forever for Bell's shareholders. In a tight money market when the company has to obtain increasing amounts of additional financing, and is reportedly considering competing with the U. S. Treasury for the hearts and minds and money of America's savings bond holders, the use of accelerated depreciation in computing Federal taxes would have provided gilt-edged returns. Finally, in 1970, Bell changed its policy. But its failure to use this technique for 16 years simply increased its own costs and those of its customers.

Western Electric.—The Bell System owns its own supplier, the Western Electric Company. Of course, it can set the prices it pays Western at whatever it wants. But even under Bell's pricing it is currently "paying" Western more than \$4 billion a year. It's not a small business. In part because of the tremendous economic power this gives Bell now, and would give Western if it could compete with other manufacturers, the Justice Department brought an anti-trust action to make Bell sell Western. Bell fought the action (unwisely, as we will see shortly), and the case was settled with a "consent decree." The decree permits Bell to keep Western, but prohibits Western from entering the market to compete with other electrical and telephonic manufacturing companies. It is clear that Bell's position has enhanced the position of its management: they have a "bigger" company to manage, and hence a good argument for higher salaries and more prestige. But what has it done to Bell's shareholders? A strong case can be made that they would be much better off if Bell would distribute the stock of Western Electric to them and at the same time move to abrogate the 1956 consent decree. This may seem like a drastic move on ATT's part—but the artificial constraints on Western Electric mean that the company cannot participate fully in the communications technology revolution that is only now beginning. An obvious example is that Western Electric does not sell to non-Bell companies even though Bell claims Western Electric's prices are lower. And this market may be one of the smaller that the present consent decree prevents Western Electric from serving. What markets might Western Electric exploit if it were not held down by the consent decree: computers, satellites, CATV, television, photography, duplicating, educational systems and libraries? The point is obvious. With stock in both Bell and a viable, independent Western, most economists agree that Bell's shareholders would be a whole lot richer. And the odds are that consumers would also enjoy the fruits of more intense competition: more technological innovation and lower prices.

Rate of return.—Fundamental to Bell's financing is its authorized rate of return on capital investment. The current theory of public utility regulation is that public commissions must hold down the monopolistic utilities' rate of return to reasonable levels. It has occurred to me that this may be backwards. Perhaps the public interest would be better served if we just forgot about the rate of return, and simply concentrated on reducing the cost-per-unit-service to customers and improving performance criteria. At the very least, it seems to me we ought to have some idea of how the country would be different if Bell had a rate of return of 4%, 6%, 8%, 10%, 12% or whatever. What would be Bell's response in terms of rates of technological innovation, new plant investment, quality of service, and so forth? Well, the answer is that we don't know the answer.

For a company where every percentage point increase in the rate of return means \$250 million annually, one would think the issue would have been addressed. It has not been.

Indeed, during the 1967 hearings I put the question to Bell's lawyers, after roughly this kind of introduction. How would Bell like a much higher rate of return, I asked. How would it spend the money? The answer? Here is an excerpt from the transcript:

"Commissioner Johnson: I appreciate you may not have prepared yourself to address yourself to such a question, but what would be unwarranted in your judgment about our permitting a rate of return to exceed 8½ percent? What

would be the day-to-day consequences in day-to-day operations for the company and the public?

"Mr. Garlinghouse (Bell Counsel): . . . I would say when we get above the range of 8½ percent we would not be hampered in furnishing good service if the earnings were brought down to 8½ percent. The service is the ultimate goal that we are trying to achieve and earnings are a vehicle to get there.

* * *

". . . Now how much higher than 8½ percent would be warranted by the economic facts, I don't know. What may be right today, may be wrong tomorrow, and it could very well be the rate of return should be higher in the future. [Tr. pp. 10, 310-11]."

How would the shareholders react to that? I was offering them the chance to try for additional hundreds of millions of dollars a year and I couldn't even get the company's lawyers to address the question!

PROMOTION OF SERVICE

It is rather disturbing that Bell management would make fundamental errors in financing that cost shareholders and consumers alike millions or billions of dollars. I began with the financial examples because they involve (1) such rather obvious blunders, (2) such large sums of money, and (3) are so directly and obviously related to shareholder losses. But finance is, after all, common to all enterprises. It is not unique to the expertise of Bell management.

Some of the most disheartening and fascinating of Bell management's errors involve the telephone business itself. How has management responded to the opportunities to increase its business and reduce its costs? It is in this area that we begin to uncover some rather fundamental lapses in communications and economic philosophy.

There is no one who I have ever been able to discover within ATT—management, sales, or scientific research—who has a sense of the social-political-economic role of the telephone in a modern-day industrialized society. They can design, promote, distribute, and install a "Princess telephone" that will transmit the human voice—even if they don't think to make it heavy enough to keep it from sliding off the bedside table. But they are seemingly incapable of thinking about the ways in which people might use that instrument in their lives.

You can point out the fact that it costs more to call Washington from Alaska or Hawaii than from London. What's the political consequence of that for the United States? They haven't thought about it.

You can ask about the role of the telephone in uniting far-flung families and friends. What would be the social impact of universal availability of a low-price WATS service ("long distance" service without a per call charge)? They don't know. What factors now affect telephone usage in local exchanges—where there is a flat monthly fee and every call is "free"? In what ways does the pricing of "long distance" service inhibit usage? How much lost revenue has Bell suffered as a result?

What would be the economic consequences for our nation if WATS (inward and outward) were made generally available? We know what air freight has done to the warehousing business in some industries. What is the correlation between "no cost" telephone service and the profits of a firm? What are the economics of a company's closing local offices and taking calls at a single national number?

So many of Bell's decisions suggest a philosophy reminiscent of the story of the two librarians at a convention discussing the condition of their respective libraries. "Oh, I'm so pleased," said one. "All my books are in and on the shelves except for two, and they're coming in next Tuesday."

It's not the telephone company's job to encourage us to keep the phone on the hook any more than a librarian is doing her job if she wants to keep the books out of circulation.

And yet I cannot help but get the impression, at almost every turn, that the telephone company mentality is of exactly that character. Management seems almost panicked at the prospect of the company's business expanding. In a moment I will discuss their attitude toward off-peak pricing principles, the Carterfone, the New York Telephone breakdown, the Public Broadcasting net-

work, cable television and data. But the common impression running throughout is that of a company not only failing to promote increased usage of its service, not only failing to serve the increased business brought its way, but a company that would actually rather fight through Commission and courts—with considerable vigor, expenditure, and occasional success—than switch.

It's a tragicomic posture of the keepers of a disintegrating, condemned old plantation home seeking its shelter in a storm—because it's all they know. But the humor quickly fades—for shareholders and customers alike. Bell's failure to understand telephone usage enough to develop new business, its failure to anticipate even the comparatively modest growth that has come along without cultivation, has cost its shareholders billions of dollars in potential profits forever lost. Of course, it has also caused the public an awful lot of grief, inconvenience, and excess costs.

One of the most ironic features of Bell's failure to expand to meet demand is that it is one of the few companies in the world that could have done so at absolutely no risk whatsoever to itself. Bell is authorized its "rate of return" on its capital necessarily employed in the business. In other words, every time it can plant a dollar bill in the ground with Commission approval (seldom if ever denied) the dollar immediately starts earning 7 to 7½% for the shareholders. Even if the business does not develop to warrant the business the shareholders get their return. It's not only a no-risk investment, it's an investment with a guaranteed return. In fact, one of the responsibilities of a regulatory commission is to see to it that the company does not "gold plate" and overbuild beyond what is warranted, because of the unfair burden that places on customers. But there is absolutely no incentive whatsoever for the telephone company to want to hold back in building to meet anticipated demand.

Off-peak pricing.—In any business there are times when plant is idle—and when any business at all will contribute to necessarily fixed costs. "Off-peak pricing" is a simple principle widely used. Anytime demand for goods or services increase substantially during limited times—whether times of day or seasons of the year—economies can often be effected by spreading that demand more evenly over time. One of the easiest ways to do this is by changing prices, making them higher during the "peak" and lower during "off peak" periods. For example, the airline industry and CAB, have come up with an intricate scheme of pricing to keep the planes in the air.

There is a significant peak in telephone usage during the four or five hours around noon every work day. During many of the 20 other hours of the day the telephone system is almost totally idle. But the Bell System, and the FCC, have had great difficulty in responding to this obvious problem with as much imagination as the airlines and CAB. This is especially tragic for Bell's shareholders, because with a \$41 billion investment in plant, any minute when it is not being used to peak capacity is costing them a great deal in lost profits. It is also costing the consumer unjustifiably—for he must sustain the financial and other costs of a facility which is substantially overbuilt. Most of the limited off-peak pricing changes (lower rates at night and weekends)—each of which has produced higher revenues for Bell—have come grudgingly. In most instances Bell has vigorously fought them at the FCC—delaying their effective date and reducing their impact. The price cuts are always substantially less than the nature of the off-peaks would justify—and the shareholders are entitled to. As a result, Bell has shown a much less smooth demand curve than it very easily could have achieved by fuller plant utilization. It has lost revenue. It has charged unnecessarily high prices. It has suffered the excruciating embarrassment of breakdowns in the system. For all of these failures its shareholders have paid a high price indeed.

Carterfone.—The sage of Tom Carter and his Carterfone is another prime example of a whole flock of instances in which corporate intransigence has won out over common sense and common shareholders' dollars. Bell is afraid of anything that has not received its papal imprimatur being plugged into its telephone system. In an extreme burst of jingoism, it even has the FCC referring to such equipment as "foreign" attachments. This is kind of like the electric company trying to discourage the installation of air conditioners and washer-dryer combinations. However, it is more than just an hilariously funny posture in which to find a twentieth century telephone company.

If the phone company would only encourage the use of its system by innovative equipment manufacturers (rather than discourage them), it would

suddenly find 200 million Americans working for Bell on their own time—rather than working against it. The increase in communications traffic in this country—which ought to be Bell's principal concern and measure of effectiveness—would jump enormously; because 200 million people can think of a lot more things to do with a communications network for themselves than one corporation can think up for them—particularly if it's not thinking.

Tom Carter's device was simple, popular, effective, and harmless to the telephone system. It was scarcely even an attachment. It simply permitted a coupling between a telephone set and a land mobile transmitter-receiver. It increased the use of the telephone system—and the potential profits of Bell's shareholders. It was fought by Bell through the FCC and courts—for 11 years.

New York telephone service.—We are all familiar with the costly breakdown in New York telephone service and the subsequent Bell implicit and explicit admissions of management failure. As ATT Chairman Romnies has candidly conceded, "There's no question but that our people in New York missed the boat in estimating the growth." But New York is not atypical of a basic ATT failing. We used to assume the company could handle a slowly growing homogeneous demand for Plain Old Telephone Service (appropriately known to company men as "Pots"). Now not even that assumption is safe. But it certainly is not a company geared to rapid growth and accelerating change. In New York it wasn't simply that Bell's plant expansion wasn't fast enough—investment was actually cut back at crucial time periods. New York serves to illustrate the long lead times in the ATT system. Lower cost planned expansion was replaced by high cost crash programs. Many customers went unserved. And how does one calculate the costs to the company of the failure to inaugurate interstate Picturephone, or the problems with rate increases in New York state, or in the general deterioration of the service reputation of the company—all of which were consequences of the New York fiasco? It all could have been avoided. It wasn't. The shareholders suffered.

ETV service.—In 1966 the Ford Foundation proposed that the benefits of satellite technology be used for educational broadcasting. In 1967 the Public Broadcasting Act was passed—providing for free or reduced rate interconnection for public broadcasting. Here was a golden opportunity for ATT to respond to a national challenge that had commanded national support. Quick provision of reliable service at a price public broadcasting could afford would have provided great benefits to the image of the company. It was a new growth field. Investments here would pay big dividends. The investment would return profit immediately, and even more in the future. What happened? ATT had to be dragged, kicking and screaming, to the FCC where it has fought for three years the service to public broadcasting that Congress ordered. For a period of time Public Broadcasting was getting horrendous, interrupted service and the FCC was forced to intervene on that account. The company blew a public relations dream—and to this day it is presenting a most unstatesmanlike posture which can only continue to have adverse long-term consequences. Bell's position is even more difficult to understand in light of its treatment of the commercial networks. The tariff for commercial network interconnection was filed in 1947 as a promotional tariff, but the rates remained unchanged for more than 20 years, being raised only recently. Now the FCC is holding a hearing to decide, among other things, whether these rates are high enough. There is strong evidence to suggest that commercial networks enjoyed "reduced rates" during part of this time period. The shareholders seemingly can't win. Bell can't optimize on selling service to commercial enterprises or on giving it way to public corporations.

CATV.—If you believe the pundits, we may be on the verge of a nationwide revolution in communications—as mass communications and personal communications services merge in a new technology that will change our nation. One thing seems sure. Whatever happens the Bell System will play at best a minor role. Bell is not a particularly significant factor in CATV. There are no test communities where the Bell System is applying its expertise for CATV communications. Suppose in the early sixties Bell had successfully argued that CATV should be a common carrier service available to all comers, and then moved to demonstrate its potential. How different things might be today, as the Bell System seemed ready to rewire the nation with the most cost-effective combination of cable and Picturephone. It is apparently not to be—and no

one will ever know what Bell has missed. But one can safely estimate the shareholders have once again been robbed of a multi-billion dollar profit potential.

Privacy.—The usefulness of the nationwide telephone system depends in large part on the fact that it is a *private* communications network. You and I would like a telephone conversation to be as close a substitute for a private face-to-face conversation as possible. We assume that no one else is listening. But the past few years we have seen an increasing erosion of the privacy and integrity of the telephone system.

Especially disturbing is the fact that Bell has had so little to say on this issue. There have been no strong oppositions to amended wiretapping legislation, no court actions against private or public wiretapping, no public opposition to unauthorized public agency wiretapping. In fact, one increasingly hears reports of Bell Systems local company cooperation with all types of communications interception.

The effect of this Bell policy is cumulative and growing. As people come to believe that the telephone is untrustworthy, their usage declines. The company loses the patronage. By failing to resist unauthorized and unnecessary "interconnection" to its system, Bell fails to protect one of its most important assets—people's trust in the privacy of the telephone, and the company's public commitment to the users' (and shareholders') interests.

Coin phones.—It's a little matter, in some ways, but one of great consequence to individual users on occasion—and significant to shareholders. I'm talking about the pay phones—their geographic distribution, the number that are out of service, and Bell's delay in converting to a system where you can dial an operator without depositing a dime. There is no way of computing the social costs for all those individuals who were prevented from making emergency calls for the want of a dime—or an operating phone. But the economic costs to shareholders have been significant. Any time someone might have made a long distance credit card or collect call and didn't—for want of a dime—they have been the losers. Bell insisted that direct operator access without a dime was impossible—notwithstanding the fact that those "backward" telephone systems in foreign countries have offered the service for years. Finally, it — FCC and Congressional pressure, it relented—after years of lost profits had passed.

Data Communications.—Because of the pendency of Commission proceedings, I do not want to say much about service in the data field. There is much to be said, and many have already spoken. A Bell official recently said: "[W]e recognize that we haven't always been on top of the job in serving our data customers." The Commission's staff has concluded: "In an industry of the size and growing complexity of the communications common carrier industry, the entry of new carriers could provide a useful regulatory tool which would assist in achieving the statutory objective of adequate and efficient service at reasonable charges." Bell now proposes to build a 60 city digital network to be available by 1973-74.

TECHNOLOGY

Satellites.—If there is a cow more sacred than all others at Bell, it is its belief that its performance in technological innovation knows no equal. The definitive evaluation of technological change in the communications industry has not been written. It should be. At least in satellites, however, it's clear that Bell forfeited an early lead in the technology. Bell built Telstar—a random orbit satellite. Then it relaxed. It failed to develop the much lower cost synchronous satellite system, which does not require the elaborate tracking and telemetry devices and uses fewer satellites. Bell has been virtually absent from the development of an entirely new international industry. Bell banked on an obsolete, capital-intensive technology (random-orbit satellites) when innovation was taking place toward a much less capital-intensive development (synchronous satellites).

TD-2 Microwave.—TD-2 microwave is simply the engineers' name for an improved system of microwave transmission. It is, however, one area of communications technology where we have some industry case studies. Competitors had jumped ahead in developing this particular type of microwave. Bell had to make a crash effort to catch up. Whether this crash effort would have been successful without Bell's basic monopoly advantages in terms of FCC protection

of Bell-maintained barriers to competitive entry cannot be determined. But TD-2 Microwave does suggest that Bell is not the fountainhead of all innovation.

My next two examples of technological innovation are ones I feel I need to be a little more tentative about. Based on conversations with a number of people in communications, in and out of the Bell System, I feel my conclusions in these two areas are correct. But I do want to note that the evidence is not as clear as in the TD-2 microwave and communications satellite cases.

Transistors.—Bell is very proud of its role in developing transistors. But the evidence is in many ways much more ambiguous. In any event, many of the developments since transistors have taken place outside the Bell System—for example, in semi-conductors. Certainly the very competitive Japanese are now simply exporting the applications of this new technology right back to use.

ESS.—Bell is now in the process of installing its version of electronic switching. Depending on the time schedule, it will have made the conversion by the year 2000. Whatever the schedule, Bell may be installing obsolete technology. Those who have studied the ESS technology decision at Bell suggest that it may have chosen a less-advanced technology than that available—in a decision which overemphasizes risk minimization, and an ultraconservative concern over system capability. As a result the Bell System may have to make costly revisions in its pattern of technological innovation in switching. This question also illustrates the difficulty in assessing the optimal pattern of technological innovation in a monopoly with vertical integration. Bell is now buying Japanese PBXs for use in the New England area where solid-state equipment is required.

I cannot close this discussion without some comment about international comparisons in telecommunications. Whenever one questions Bell's performance, the non-sequitur reply is usually "have you ever used the British or French telephone system?" This is a strawman, as anyone who has made comparative studies in this industry recognizes. I would suggest that we can learn a great deal about performance from telecommunications systems in other countries such as Sweden, Switzerland, West Germany, or Japan. Isn't it ironic that while we can use our space technology to put a man on the moon, we will have to suffer the humiliation of seeing Canadian and Indian domestic satellites in the skies before ours? In many countries there are numerous other services, technologies, or lower prices that we do not have in this country—even if it can be shown that on some absolute scale an evaluation might find the American system superior.

CONCLUSION

This speech is already much too long. But I felt a few examples were really necessary to make the point.

Bell management's policies deserve the public interest in many ways. We all know that. Few in the company—or the FCC—seem to care very much.

The point is that many (though not all) of these socially retrogressive policies also fail to serve Bell's shareholders—robbing them of billions of dollars. Sometimes the benefits go to management. Often as not they go to no one.

For whom *does* Bell toil? It's hard to tell. It's not the public. It's not the shareholders. Management? Well, yes, but it's not that simple either.

The fact is that a national monopoly with a \$41 billion plant, and over 50 federal and state regulatory agencies, enjoys the benefit of neither a competitive spur nor an effective regulatory check. When the FCC fails to probe, and question Bell management; when the FCC does not permit its staff to play a tough adversary role in Bell's rate hearings; the shareholders of the company are seriously disserved as well as the public.

Some form of competition may be the answer. Whether such a conservative approach can still muster any adherents in a Republican Administration under the influence of Radic-Lib American businessmen remains to be seen.

Exhibit 14

[Reprinted From The Washington Post, Sunday, December 16, 1973]

NEVER HAVE SO MANY PAID SO MUCH FOR SO LONG,
FOR SO LITTLE PROGRESS



1930



1938

Your telephone is dying of old age, and AT&T expects you to pay for the funeral.

Sounds absurd, doesn't it? Here in the bosom of free enterprise, that any commercial company could force you to accept whatever it decides you need at whatever price it wants you to pay. But until 1968, that was the situation—and now AT&T wants those "good old days" back again.

If they get their way—if the big lies they've been telling go unchallenged—the results will range from an escalation of our monthly phone bills to lower efficiency and higher prices in a communications-starved economy throughout the nation.

Bell's version of the American dream:

A multi-billion-dollar nightmare.

Imagine living in a country where the only appliance manufacturer was the single electric company that supplied power to the nation. So the amount of power your appliances consumed was determined by the people who sold you your power. How efficient do you think their designs would be? How anxious would they be to innovate power-saving features? Or, for that matter, any features at all—since the fewer the changes, the higher the profit.

Fortunately, progress demands a choice. So the U.S. utilities who made appliances at the start of the century soon stopped to do what they did best: producing and distributing power. Result: instead of half-a-dozen toasters on the market, there are literally hundreds; rather than a handful of refrigerators to choose from, there are dozens—in all shapes, sizes, capacities, efficiencies, colors and price ranges. The same mixers, radios, vacuums, washers...but not telephones.

It's understandable. When you're "the only phone company in town" for the largest part of the nation, it's not hard to get a feeling of omnipotence. And because it's easy to be "best" when you're the only contender, there's not much reason to develop new solutions for new problems. Problems that have quickly grown in size and seriousness. While neatly camouflaged behind contoured, illuminated phones with dials in the handle—masquerading as major progress.

Giving business the business.

As recent phone calls you've made will confirm, the nation's biggest communications problems are in business. Waiting interminably for people to be found. Getting the wrong party. Having someone interrupt your conversation. Being cut off in mid-word. Finding yourself talking to the corner candy store as well as the chairman of the board. Or "gleep-buzz-click!"—talking to a phone that's suddenly gone dead. Until you wonder whether the phone company's got a grudge against your business.

Maybe it does. The mainstay business telephone is virtually unchanged from the 1938 "black beauty" you see above. (At that rate of progress, where would your business be?) If the phone company's "choices" were the only ones you could make, you could have a problem.

Happily, that's not the case...at least as long as AT&T can't get its way. In 1968, the Federal Communications Commission ruled individuals and businesses could attach non-Bell equipment to Bell lines. And as a result, more than 16,900 business users to date have installed independently-manufactured "interconnect" telephone gear on more than 286,000 phone lines. Which is hardly surprising, considering the alternative.

On push-button phones (known as "key systems" in the trade), non-Bell units offer literally dozens of capabilities unavailable in comparable Bell offerings. Including features like greater capacity, automatic privacy, add-on conferencing, built-in speaker intercom and paging. Plus hands-free operation on inside and outside calls, music on hold, station-by-station toll-call restriction, more attractive styling and many more...most of them standard features.

On larger systems, telephones offer similar versatility, with built-in "intelligent" features like programmed call forwarding; executive priority; call transfer without operator assistance; remote call pickup and more. Add to this a projected savings for several "interconnect" customers of \$50,000-\$100,000 over a 10-year period, and AT&T has a sizeable headache.

Enter the big lie.

Tell it loud enough and long enough and people will believe you. With that in mind, perhaps, AT&T chairman John D. deButts made a speech claiming that competition is harming the telephone industry. Despite significant savings documented across the nation. Despite more advanced and sophisticated hardware available from "interconnect" sources. Despite the fact that interconnect's innovations have produced the first real phone company action in years.

For while Mr. deButts was talking, his company was introducing its new "Com-Key" system through market tests in various states. When it is widely introduced in 1974, Com-Key will bring Bell customers features that have been available from "interconnect" for over three years. If we're lucky, who knows what we'll get in 1984?

In early 1970, AT&T set up the "Denver Project"—a widely-diversified, top-calibre task force of Bell Laboratories, Western Electric and Bell Operating Companies working on a 'crash-program' basis, developing large-scale systems to compete with "interconnect" offerings. Cutting their usual 6-year product lead time by more than half.

And there's news of a new "flexible" pricing plan that will finally give users a little break on Bell's traditional rent now and pay and pay and pay later no-option formula.

If this is "harm to the industry," someone's confusing "the industry" with Bell.

The biggest lie of all.

Now, AT&T has added more shorts to the circuit. If you can't lick 'em or legislate 'em out of existence, it's 'scare the public' time: Mr. deButts has stated that if more businesses add

non-Bell phone systems, residential phone costs will go up. Because "business business" is more profitable than residential business. Unfortunately, this is about as logical as the merchant who loses money on each sale claiming "I make it up on volume." Because, while "business" volume is far greater than residential, its costs are even more so.

Think about it. When was the last time you needed a telephone repairman in your home? When, if ever, did you replace a home phone because it wore out? The majority of your home phone bills come from services used. Once installed, home phones provide Bell with very little trouble. And a pretty decent installation charge for a \$14.00 telephone, a hundred feet of wire and an hour or two of a technician's time. And you pay for the equipment as long as you have the phone. No wonder the phone company likes you so much, creating "Princess" and "Trimline" telephones to boost your rate even more.

Business isn't such a fun customer. For eight to ten hours a day, it "demands" enormous facilities, taxing exchanges and cables to the limit—or past—then dwindling to a trickle for 16 or so hours more. That's costly. Meaning billions of new dollars a year for equipment that's used only 1/3 of the time for five days. And almost not at all on weekends.

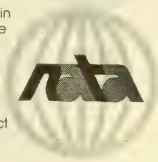
That's just the beginning. Because business is so hard on its facilities, they're more prone to problems. Requiring more dollars for equipment, parts and people to keep them running. In major cities, some buildings have "residential" repairmen, complete with their own offices... what a pain in the profit! Same thing below-ground as well, as any city driver dodging open manholes can tell you. Business phones cost far more to run.

After you've sat at a desk, watching repairmen come and go, sometimes for days on end, it's hard to believe that Bell's making a better buck keeping businesses running. Especially when some businesses can't be reached for days.

With all you're paying the phone company, shouldn't you get some change?

We think you have a right to know the facts. Not to indict Bell for blackmail-by-wire. But because communications has simply become too big for one company to handle, putting self-interest before national interest. "Mother" Bell doesn't always know best... and communications are too vital to take chances.

For more information on the crisis in communications, write our Executive Director Jim Holmes. The North American Telephone Association. A National Organization of Independent Manufacturers, Distributors, Suppliers, Service Firms and Consultants Serving the Interconnect Industry. 1725 De Sales Street, Washington, D.C. 20036 (202) 466-2454.



CAN WE AFFORD TO LIVE IN THE U.S. OF A.T.&T.?

In a recent speech before the National Association of Regulatory

Commissioners, John D. Debutts, Board Chairman of Telephone and Telegraph Company, described his company's telephone service as the same as it was stated forty-six years ago:

"to continue to furnish the best possible telephone service at the lowest cost consistent with financial safety."

But 1927 is not today. "Financial safety" has become one of the highest profit margins in American industry. The "best possible telephone service" is what Bell decides the market will pay for. And the communications are at an inflated price and short-circuit our national economy.

"I'm sorry, but the number you have reached is out of order, or has been temporarily disconnected. The number you have reached." While American communications needs accelerate,

our communications system progresses as an overworked operator at the end of the day.

Despite major accomplishments in the past, Bell's monopoly has become a bastion of the status quo. And its cost is too high for the American higher phone bills, month by month. But on a national scale, large enough to affect the price of goods we buy, and those we try to sell in competitive international markets.

Suddenly, Bell had its first real compulsion. And it hurt. In a survey two years later, 97 percent of the business customers who switched to interconnect were motivated by cost savings. And 16,900 business lines have interconnected. 786,000 lines of communications services throughout the country, abandoning Bell equipment for largely the same reasons. And the trend is increasing.

Little wonder. In a world where labor constitutes the bulk of product, when interconnect systems offer more efficient means of doing the same job, and operators make like selective talk to actual or place toll calls without operator intervention. Abbreviated dialing of frequently-used numbers. Hands free call announcement and intercom. And literally dozens more.

But that's only the beginning. Non-Bell equipment has produced major savings for its owners in a number of other interesting ways. Because of greater intercommunications and switching capabilities, interconnect systems reduce the number and length of outward calls. For example, many advanced PBX (private branch exchange) systems permit rapid transfer of incoming and outgoing calls without operator intervention. The best Bell offers transfers incoming calls only.

To make Bell even more uncomfortable, interconnect systems also free switching equipment once calls have been transferred (Bell's doesn't), giving businesses greater usable capacity. What's more, their more advanced (and inherently more reliable) computerized design takes up less rentable space, providing even greater savings.

Savings on telephone costs is the coup de grace. Using a popular method of analysis, one comparison study computes annual savings on a range of non-Bell equipment at approximately 19%, rather substantial, considering that U.S. manufacturing firms average profits of only 5% to 10% in a prosperous year.



"This is a recording. . . What we have here is a failure to communicate. While foreign visitors always marvel at the U.S. telephone system—and no doubt many will do—the fact is, we're slipping. Many of the most modern technologies— not a few pioneered by the Bell system itself— remain largely unavailable here. Despite all the virtues of the future, Mr. Bell passionately embraces the past. And dollars are the reason.

Despite major conveniences customers request, despite huge potential savings in cost and time, despite its obligation and professed intent to provide the best possible telephone service at the lowest cost, Bell operating companies and their manufacturing "sister," Western Electric, continue to offer a restricted range of products. And even more restrictive policies that prevent others from filling the gap.

Who profits? Judge for yourself: Western Electric, now the tenth largest industrial corporation in the U.S., has doubled its gross income in the past seven years. Of its \$6.6 billion 1972 sales, \$3.3 billion goes to Bell operating companies—who "buy" competitively and "without obligation" from Western in a marketing arrangement that led a U.S. District Court to comment:

"When one sees that without obligation Western Electric is nevertheless called upon to supply over 99% of the Bell System requirements, it can only be concluded that the words of the Bell-WE contract are wonderful to look upon but in market implementation they have no more reality than a Western movie sell. It was manifest from the evidence that Bell purchased from independent suppliers only to fill the peaks and windows (sic) of its demands, i.e., if WE didn't make it or didn't have it, and felt it could use it from Bell, i.e., WE and the Bell System telephone companies, would buy it from independent suppliers—until such time as WE produced it."

Who profits? Independent economic analyses presented before the New York and New Jersey public utilities commissions showed Western Electric profits were well above industry average. Before taking into account persuasive arguments that many telephone companies are indirectly underwritten by Bell operating companies and Bell Laboratories, profits are even higher.

Who profits? Definitely not the nation.

... please hang up and dial again: An alternative to the AT & T party line

"Nature abhors a vacuum," wrote a physicist once. And free enterprise works the same way. Recognizing the shortcomings of AT & T's "product line," other U.S. concerns moved to fill the gap, spurred by the landmark Federal Communications Commission "Carterfone" decision of 1968, which permitted connection of non-Bell equipment to telephone lines. Already, many independent telephone companies in foreign and independent domestic companies, they began what is now known as the "interconnect" industry. And offered alternatives to the American market.

"Please hang up. There appears to be a receiver off the hook. . ." For party, says Bell. All this has not exactly pleased AT & T. In fact, it has infuriated them. Bell officials have been reeling since a recent study, called "the most stringent possible guidelines without the intent of the order," they are unduly restrictive, they permit Western Electric a competitive edge. It has not earned through its technical and manufacturing acumen. As the U.S. District Court observed, "It can only be concluded that, as indicated, decisive anti-competitive pressures have been and will be attempted to be maintained by telephone companies with respect to subscriber apparatus. . . ."

By requiring complex and costly Bell-supplied interfaces, even for customer-connected devices identical to Bells, AT & T has given itself a competitive "edge" in pricing. Under the guise of "protecting the network," Bell helps itself and Western Electric in other interesting ways. Since 1968, there has been a continuous "storage" of interconnect devices in Bell warehouses. The cost of the storage and the cost of the interconnect state tariffs require interconnect customers to pay for Bell equipment they neither want nor install—in fact, the very equipment they interconnect to eliminate!

Yet, despite all these manufactured difficulties, over 9300 firms switched to non-Bell equipment last year over 150% more than the year before.

... all circuits are busy. Please re-dial your call at a later time."

New AT & T is attempting to achieve in the form of state utility commissions what was achieved by the Federal Courts. In the September, 20th speech quoted above, Mr. Bellitt was again warning of the consequences of interconnect: a "systematic evaluation" of interconnect's effects. Economic. And, terming it a "quality dependency and availability of service," in other words, the first step in a war of attrition, whose first legal step has been a formal proposal before the Public Service Commission of North Carolina. For once interconnect is hailed in its tracks and deprived of revenue. AT & T can play "catch up" technologically, while its competition is slowly strangled by expenses.

How much it costs to live in the U.S. of AT & T. And what to do about it.

If AT & T is allowed to play monopoly with U.S. telecommunications, it could cost quite a lot. An absolute minimum of \$3.4 billion in the next decade alone. That's over \$340 million a year, taken from private customers dollar by dollar, month by month. From business subscribers, in hundreds and thousands dollar bites. And ultimately from the economy itself on a scale large enough to affect our viability as a nation. What can you do about it? Start with the facts. Write for our free information kit and see what it can cost to live in the U.S. of AT & T. Or pick up your telephone and call our Executive Director, Jim Holmes.



The North American Telephone Association. A National Organization of Independent Manufacturers, Distributors, Suppliers, Service Firms and Consultants Serving the Interconnect Industry.
1725 De Sales Street, Washington, D.C. 20036 (202) 466-2454

"there may be sectors of our economy and telecommunications is one of them — where the nation is better served by modes of co-

operation than by modes of competition, by working together rather than by working at odds."

Mr. John D. deButts, Board Chairman, AT&T, in an address before the National Association of Regulatory and Utility Commissioners, September 20, 1973

"Power tends to corrupt; absolute power corrupts absolutely." John Dalberg, Lord Acton.

In a recent speech before the state regulatory commissioners' national convention, American telephone & telegraph's board chairman made a lengthy, emotional case for monopoly in American telecommunications. The alternative? Poor equipment. Degraded service. Higher phone bills. And a slowdown in the progress of a communications network that deButts says has "a pace of technological innovations unmatched by our knowledge in any other industry."

To this we must say "Nonsense!" As responsible citizens. As knowledgeable communications professionals. And, yes, as competitors. For what Mr. deButts is attempting to do, is use a lawful "natural" monopoly—Bell's legislated custodianship of our national communications network, which it runs at a profit—to establish an unlawful monopoly over the manufacture, sale and installation of telephone equipment.

The gospel according to Bell. Mr. deButts is an intelligent man. Knowing his company's score tactics would not go unanswered, he sought precedent for a defense. Its name: "the common carrier principle."

mechanical crossbar and relay switches to the limit of their capability. However, the almost universal adherence to technologies that are 50 and 100 years old is severely restricting the capability and greatly increasing the cost of telecommunications system expansion.

And well it might! Step-by-step switching, invented by Almon Strowger in 1891, is still the most widely-used switching equipment in the world. With its comparatively high labor and maintenance costs, limited options, high noise, slow speed, large space requirements and lack of economy with increasing size, it is more than a little outdated. Though more flexible, crossbar switching, first invented in 1917, and the next most widely used method, has major problems when it comes to

or, as Mr. deButts puts it "what passes for it." But the "passing," he's concerned about could well be of another variety, considering all the features available on competitive equipment. Features such as call transfer from any telephone in a system; unattended night answering from any telephone in a system; add-on conferencing, call-forwarding without operator assistance, hands-free intercom and outside calling, remote call pickup on non-pushbutton phones, automatic toll-call restriction on phone or

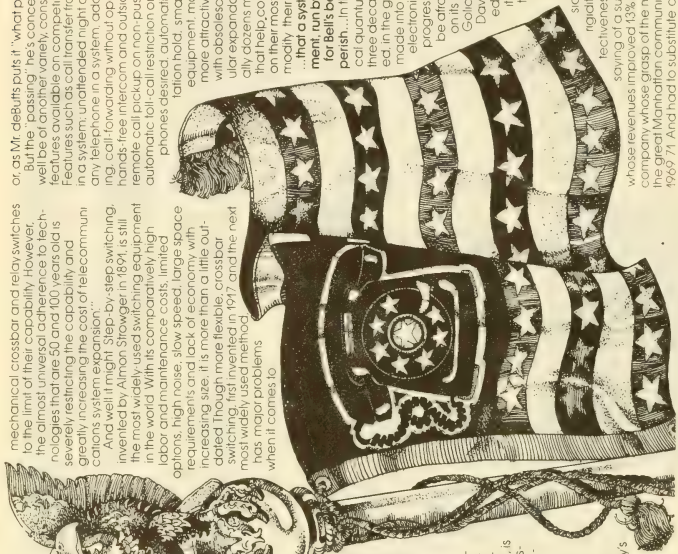
phones desired, automatic privacy, consultation hold, smaller, more reliable equipment, more compact,

more attractive instruments with obsolescence-proof modular expandability, and literally dozens more innovations that help companies save on their most expensive commodity: their people's time.

...that a system of Bell equipment, run by Bell people, for Bell's benefit, shall not perish...In the technological quantum jump the last three decades have launched, in the great leap we've made into solid-state, micro-electronic, micro-second progress, could Bell be afraid of falling flat on its face? What was Goliath thinking when David's slingshot started moving? What

it's all boiled down to is a struggle between market structure and innovation. On one side, increasing rigidity, monolithic protectiveness and the doom-

saying of a suffering monopoly whose revenues improved 13% last year. The company whose grasp of the market created the great Mammalian communications failures of 1969-71. And had to substitute crash construction,



According to Bell, the common carrier principle means "end-to-end responsibility" up to and including every telephone used by every subscriber in every state, city, town and hamlet in the area it serves.

To maintain otherwise is sacrilege: individuals and companies who challenge this concept according to Bell, are speaking out in the name of profits, not progress. And in the name of System, Integrity, Economy, and Continued Development of Progress, they should be smitten down by state regulatory commissioners (Interestingly enough, Mr. deButts has chosen state commissioners for his crusade because the FCC had already desecrated the Bell shrine with its landmark "Carterfone" decision, which opened for free enterprise instead of monopoly, permitting telephone users to independently buy and own terminal equipment connected to the national network.)

Why the sermonizing? Why the tumult? Why the crusade? What does a corporate giant with total assets of over 60 billion dollars and 1972 operating revenues of over 21 billion dollars have to fear from an industry whose 1973 sales were \$150 million—or less than seven tenths of one percent of Bell's? Why should an immense company whose 1972 research, development and design budget alone was more than twice this figure be worried about such a fly-speck on the face of the industry?

Why would the head of such a vast entity be concerned about securing "a moratorium on further experiments in economics" sufficient to permit systematic evaluation of whether competition might be feasible in telecommunications—in other words, a delay sufficient to permit Bell's only competition to dry up and blow away?

Remember the dinosaur? When a creature, institution or society can't or won't adapt to changing climates, it goes the way of Tyrannosaurus Rex. It happened in ancient Greece. It overtook the Roman and Byzantine empires. And it's happening at the phone company. The dinosaur had no way out. The Greeks, the Romans and the Byzantines became complacent. And maybe AT&T as well. Which is ironic in a country that's been built by innovation—whose technology and industriousness have been a benchmark in the world.

Step after ponderous step, Bell's growing mass has fallen behind in a race with the future. Often, by not utilizing concepts it has pioneered. Noted economist Dr. Manley I. Ivin, in his testimony before the Subcommittee on Anti-trust and Monopoly, quoted a book on technical progress as follows: "Arthur Collins put the case for technological innovation dramatically when he observed: 'The instruments of Bell and Edison have been beautifully refined in the nearly 100 years since their invention. Fifty years of use and development have carried the electro-

expansion. Yet in an age where even home radios use transistor technology—ironically enough, invented by Bell—Bell's most advanced electronic switching system, the computer-controlled Electronic Switching System, uses reed switches, electromechanical technology more than a generation old, leaving Bell feeling the way Einstein's math teacher must have felt.

A funny thing happened on the way to obsolescence. Because of widespread frustration over inadequate service, because people wanted features the phone company wouldn't or couldn't deliver, because of ever rising phone bills, people sought another alternative. And free enterprise (remember what that is?) reared its ugly head in the form of firms supplying independent telephone companies here and abroad. Sensing a need they invested as heavily as they could, given the size of their mammoth competitor, in delivering today's technology today. And promptly found businesses with receptive ears. People, who wanted to take advantage of the enormous performance and cost advantages made possible by modern marvels such as large-scale integrated circuits, thin film technology, mini-computers and computer programming, to name just a few. And who could blame them? Why settle for Bell-provided equipment when they could have more economical, more versatile systems from the competition.

with its added costs, for planned growth through market knowledge.

On the other side are vast potentials resulting from the burgeoning growth of business on the one hand, and the technological potential to accommodate it on the other. Not merely new firms, but entire new industries whose talent and resources seek to contribute to communications progress.

Mr. deButts would have us believe that monopoly encourages greater progress through daring innovation, increased manufacturing efficiency, improved responsiveness to public needs, higher output and lower costs.

Despite the fact that in four short years, the interconnect industry, as "the competition" is called, has outpaced its mammoth rival in many areas of telephone technology. And Bell is just now beginning to offer systems and features offered years ago by its independent rivals.

As Dr. Ivin said before the U.S. Congress, "We are thus admonished (by Bell) to institutionalize the concept of the corporate conscience—a conscience immune from the checks and balances of either the marketplace or direct regulation."

If this were another country, under another flag, if AT&T were a state-owned monopoly, if there were no free-enterprise alternatives, the name of the game would be very clear. But we are the country we are, in large measure because of the element of choice. Freedom of choice.

It is time the United States Executive, Congress and Courts started asking hard questions about whose interests Bell is really serving. Time we stopped playing monopoly with U.S. telecommunications.

For more information please write our Executive Director, Jim Holmes, The North American Telephone Association, A National Organization of Independent Manufacturers Distributors, Suppliers, Service Firms and Consultants Serving the ITC/De Sales Street, 1725 De Sales Street, Washington, D.C. 20036.



OR A.T.&T.
FAMILY
COUNTRY

WHAT'S GOOD
ISN'T NEAR
GOOD FOR THE

EXHIBIT 15

MEMORANDUM FILED
SESSION JUN 6 1974

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

June 3, 1974

TO: THE COMMISSION

FROM: COMMUNICATIONS DIVISION

SUBJECT: Report on Rochester Telephone Corporation's Interconnect Offering (Case 26064)

This memorandum is presented for the information of the Commission. No action is required.

Opinion No. 72-18 in Case 26064, dated August 21, 1972, required Rochester Telephone Corporation (RTC) to submit a quarterly report on the operation and results of the company's interconnection tariff which became effective on February 6, 1973. This memorandum provides a review of the operation and results for the first full year plus two months of the company's offering.

DISCUSSION

Attached as an Appendix are RTC's most recent quarterly report for the quarter ending March 31, 1974, and charts summarizing pertinent data in the reports. Chart #1 shows the growth of interconnected lines with a division for lines equipped with NPD's and a division for lines equipped with Bell-type connecting arrangements. It is apparent that the preponderance of customers desiring to connect their own equipment to the network choose the NPD method as opposed to Bell-type connecting arrangements. It also appears that after the first eight months of the interconnect offering the growth rate of interconnect lines is settling down to approximately eight (8) percent per quarter. The single largest increase in interconnected lines

occurred in June, 1973, when the Eastman Kodak Company negotiated the purchase on-premises telephone equipment as approved by this Commission in separate Case 26424. The 969 lines with interconnected equipment are relatively insignificant (0.34%) when compared to the total 289,500 lines served by the Rochester Company. In fact, if the eight percent growth rate persists it will be more than five years hence before one percent of the RTC lines have interconnected equipment. It is also interesting to note that, with the exception of automatic answering devices (offered under a separate tariff provision), only five residence lines have customer-provided equipment.

Conclusions on investment, expense, and economic impact factors are difficult to compile at this early stage of experience. The Division is planning to conduct an economic impact study in this area after more data is available.

The qualitative measures of service show no detrimental impact on the overall service provided by RTC. Customer trouble reports are the prime measurement in this area. In order to provide comparative measurements, and because RTC does not have a station count on interconnected lines, Chart #2 presents trouble reports per 100 lines rather than the conventional reports per 100 stations. One division shows total company reports adjusted to remove station troubles, thus making it more closely comparable to the division showing reports on interconnect lines. This comparison shows that customer trouble reports to RTC are lower on lines with interconnected equipment than on lines with RTC-provided terminal equipment. Further, as an overall indicator, the total company customer trouble reports

per 100 stations since October 1973, has improved upon the objectives stated in the Commission Service Standards in five of the six months reported (i.e. average 4.0).

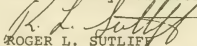
The company stated at the NARUC Communications Committee investigation that "no specific cases of improper signal levels, hazardous voltages or improper line voltages have been detected to date by RTC" and that the company is aware of "no instance where a privately-owned system has failed."

CONCLUSION

The RTC interconnect offering, when reviewed using available indicators, appears to be acceptable thusfar to RTC, to its customers, and to the other parties involved. However, data is fragmentary and cannot be viewed as conclusive. The only complaints received by the Division in this matter have been to request implementation of the RTC method in other telephone companies. We do not believe that sufficient experience has been gathered to require other companies to use the RTC method.

The Communications Division will, of course, continue to monitor the offering and report our conclusions and recommendations to the Commission.

Respectfully submitted,


 ROGER L. SUTLIFF
 Chief System Planner

APPROVED:

NEIL A. SWIFT
 Director of Communications Division

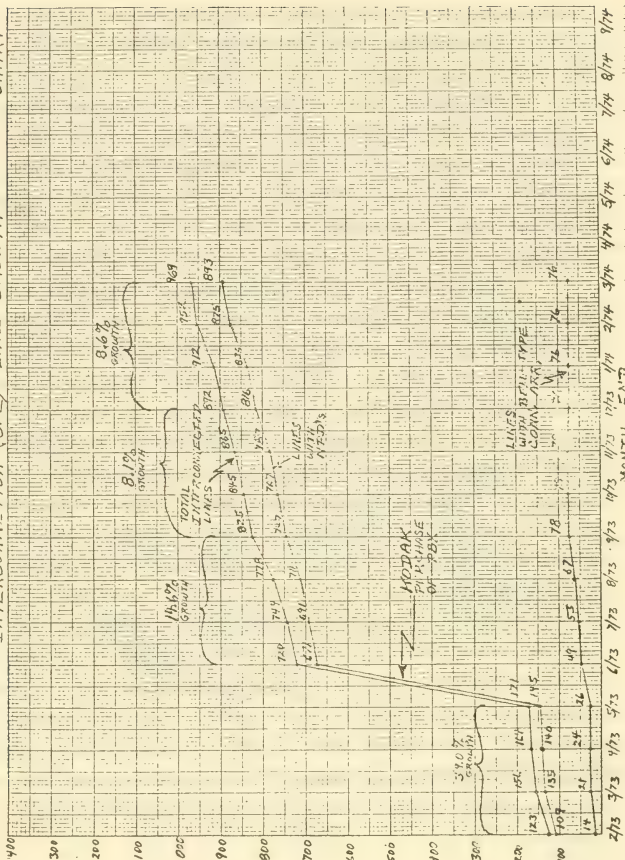
Attachment

RWH:bvb

INTERCONNECTED
LINES

ROCHESTER TELEPHONE CORP.
INTERCONNECTION (CPE) LINE GROWTH

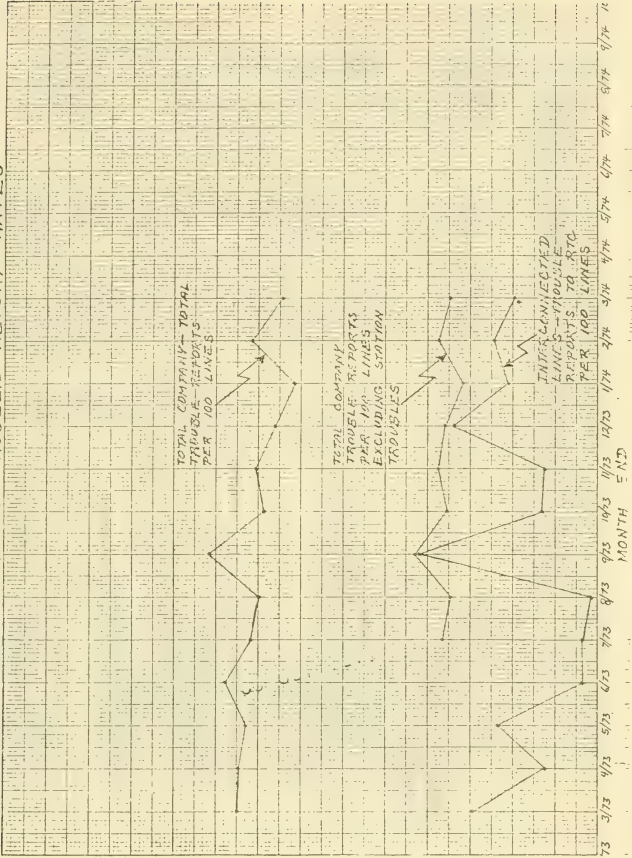
CHART



ROCHESTER TELEPHONE CORP.
CUSTOMER TROUBLE REPORT RATES

CHART 2

R 100



NOTES TO THE COMMISSION
Quarterly Interconnection Report Number

(Quarterly report dealing with operation and results of Interconnect)
(tariff filing effective February 6, 1973; submitted in accordance)
(with the Commission's Order in Case 26064)

QUANTITATIVE MEASURES				CUMULATIVE TOTALS THROUGH MARCH 31, 1974		
A. Number of lines interconnected:				JANUARY 1974	FEBRUARY 1974	MARCH 1974
1. N.P.D. - Main (access) line						
a. Business						
(1) Voice - Switching systems				0	22	2
(2) Voice - Station equipment only				18	18	13
(3) Data				1	--	--
b. Residence				1	--	--
2. N.P.D. - Extension						
a. Business				--	--	--
(1) Voice				--	--	72
(2) Data				--	--	3
b. Residence				--	--	4
3. Leased Channels for Voice (2 NPD's required)				--	--	134
4. N.P.D. - Total in service				836	875	893
5. Bell Type Interface						
a. Business						
(1) Voice - Switching systems				--	--	14
(2) Voice - Station equipment only				--	--	0
(3) Data				--	--	62
b. Residence				--	--	0
6. Bell Type - Total in Service				76	76	76
7. Total lines with interconnected service				212	952	969
B. Investment						
1. Equipment in service						
a. N.P.D.				\$ (309)	\$ 2,043	\$ 1,935
b. Bell type interface				\$ 876	601	\$ 1,635
2. Equipment inventory or held for future use						
a. N.P.D.				\$ 11,418	\$ 12,591	\$ 11,838
b. Bell type interface				\$ 2,403	\$ 3,601	\$ 2,355

UNITED STATES DEPARTMENT OF COMMERCE
BUREAU OF ECONOMIC ANALYSIS
Report Number

CUMULATIVE TOTALS
THROUGH MARCH 31,
1974

MARCH
1974

FEBRUARY
1974

JANUARY
1974

QUANTITATIVE MEASURES (cont'd)

C. Expense

1. Certification expense					\$ 1,586
a. Switching systems					\$ 937
b. Station equipment					
2. Inspection expense					
a. Initial installation inspection					\$ 1,820
(1) Switching systems					\$ 845
(2) Station equipment					\$ 580
b. Periodic inspections					
a. Test desk expense on interconnected lines					
a. Telco troubles					\$ 120
b. CO/ME troubles					\$ 183
c. Undetermined troubles					\$ 140
c. Repair expense (dispatched) on interconn. lines					
a. Telco troubles					\$ 1,189
b. CO/ME troubles					\$ 825
c. Undetermined troubles					\$ 568

D. Certification

1. Technical reviews					
a. Quantity and man-hours of technical reviews:					
(1) Switching systems					10/69.50 MH
(2) Station equipment					36/39.25 MH
b. Charges made to customers					
(1) Switching systems					\$ 1,527
(2) Station equipment					\$ 577
2. Initial inspections for certification					
a. Quantity and man-hours of initial inspections:					
(1) Switching systems					15/91.75 MH
(2) Station equipment					37/51.05 MH
b. Charges made to customers					
(1) Switching systems					\$ 1,784
(2) Station equipment					\$ 672

CUMULATIVE TOTALS
THROUGH MARCH 31,
1974

H. Investment Data - equipment removed from service				
1. Account 231	\$ 13,678	\$ 1,305	\$ 2,603	\$ 1,399,655
a. Original cost	\$ 5,411	\$ 548	\$ 1,062	\$ 111,010
b. Depreciation reserve requirement				
c. Salvage				
(1) Reused	\$ 13,470	\$ 1,305	\$ 1,227	\$ 110,242
(2) Sale to customer			\$ 12	\$ 698,053
(3) Junked	\$ 391		\$ 44	\$ 809
d. Cost of removal				
2. Account 232		\$ 1,516	\$ 4,499	\$ 1,654,981
a. Original cost	\$ 3,461		\$ 20	\$ 11,098
b. Depreciation reserve requirement	\$ 121			
c. Salvage				
(1) Reused				\$ 0
(2) Sale to customer				\$ 1,275,019
(3) Junked				\$ 0
d. Cost of removal	\$ 2,175	\$ 303	\$ 829	\$ 33,563
3. Account 234				
a. Original cost				\$ 63,478
b. Depreciation reserve requirement				\$ 12,418
c. Salvage				\$ 19,409
(1) Reused				\$ 0
(2) Sale to customer				\$ 4
(3) Junked				\$ 1,633
d. Cost of removal				\$ 19,010
4. Account 242				\$ 5,243
a. Original cost				\$ 0
b. Depreciation Reserve requirement				\$ 1,467
c. Salvage				\$ 0
(1) Reused				\$ 0
(2) Sale to customer				\$ 0
(3) Junked				\$ 4,680
d. Cost of removal				\$ 0

ESTR TELEPHONE CORPORATION
 Interconnection Report Number

Page 5

CUMULATIVE TOTALS
 THROUGH MARCH 31,
 1974

QUANTITATIVE MEASURES (cont'd)

J. Revenue Loss - equipment removed from service \$ 269 \$ 188 \$ 777,612
 K. Number of stations removed from service 20 72 15,671

QUALITATIVE MEASURES

A. Customer Reports per hundred lines COAME vs.

reports per hundred lines Telco equipment

1. Including Telco station troubles
2. Excluding Telco station troubles

B. Interconnected Service

1. Total trouble reports
2. Trouble in Telco facility or equipment
3. Trouble in COAME
4. Tested or found OK

C. Use of Remote Test Feature (NPD) - number of

reports where use of remote test feature:

1. Isolated trouble to COAME
2. Isolated trouble to Telco facility or equip.
3. Could not determine trouble location (incl. Test OK)

D. N.P.D. Failures

1. Number of occasions where NPD was source of

trouble requiring:

- a. Replacement of components in NPD
- b. Complete replacement of NPD

2. Total hours lines out of service as

a result of NPD failures

E. Bell Type Interface Failures

1. Number of occasions where interface was

source of trouble requiring:

- a. replacement of components
- b. complete replacement of device

2. Total hours lines out of service as a

result of interface failures

AVERAGE REPORTS
 12 MONTHS THRU 3/31/74

1.75/ 8.09

1.75/ 3.60

CUMULATIVE TOTALS
 THRU 3/31/74

157

59

44

54

27

14

69

5

0

9.25 hr.

0

0

0

0

EXHIBIT 17



COM KEY 718



FLASH

San Francisco, November 19, 1973

TO ALL HOLDERS OF MARKETING PRACTICES:

GENERAL

Effective November 19, 1973, a new service offering, COM KEY 718 was introduced. The COM KEY 718 is a new packaged key telephone system designed to meet customers' needs in the small and medium key telephone market. The features offered are those which are most demanded by customers who have been involved in competitive activity. Thus, you will notice the new COM KEY will have some limitations and will not fit all our key telephone customers needs.

Our Sales Policy to minimize product churning will be:

- Use to offset competition
- Concentrate on customers with three lines and above who are moving, remodeling or requesting new service.
- Not ignore other valid customer requirements, but minimize "swap-outs" by not actively promoting in the non-competitive segments of the Market.

The COM KEY 718 is called such because it is limited to a maximum capacity of 7 lines and 13 stations. The system is square, that is: all lines will be picked up at all stations in the same sequence.

The 718 system will be tax exempt because of the universal intercom feature. This tax exempt status will generally pertain to all supplemental items of equipment associated with the 718.

BASIC SERVICE FEATURES:

- Pickup, hold and illumination including wink hold - its operation is the same as in the present COM PAK telephone service.

EXHIBIT 17

**Bell Laboratories**

subject: NITZUKO/TIE 1030 System -
Feature and Economic Evaluation
as Compared to Similar Bell
System Offerings. Case 38897-76

date: February 16, 1970

from: F. M. Fenton
DR-3225.720216.01MFABSTRACT

This memorandum takes a close look at a specific competitive key system. It compares this system with what is available (and what will soon be available) from the Bell System both on a feature basis and on an installed price basis.

Attached is literature supplied from the TIE Corporation which details the features and uninstalled prices of the NITZUKO System.



Bell Laboratories

subject: NITZUKO/TIE 1030 System -
Feature and Economic Evaluation
as Compared to Similar Bell
System Offerings. Case 38897-76

date:

from: F. M. Fenton
DR-3225.720216.01MF

MEMORANDUM FOR FILE

1.0 INTRODUCTION

It is well known that the Bell System is currently facing an invasion from Japanese sources in the PBX field as a result of the Carterfone decision. It is now becoming apparent that breaches are being made in the Key System area as well. As a result, an informal request was made to Department 3225 by AT&T to evaluate a Japanese key system that was making inroads in Michigan Bell's territory.

2.0 THE COMPETITIVE SYSTEM

The system under consideration is being manufactured by the Japanese Nitsuko Company and is being marketed in the United States by the Telephone Interconnect Equipment Corporation. Attachment I details the various features available and their associated prices. It should be noted that many of these features are of a different flavor than those offered by the Bell System. In particular, the following points should be noted.

1. The basic apparatus is a relay group which is conceptually similar to a KSU. It can be arranged to provide for a maximum of 9 CO/PBX lines and 3 intercom paths or 12 CO/PBX lines and no intercom paths. This unit does not include the line circuits (similar to and priced competitively with the 400D), but it does include the register circuits for the intercom.
2. The intercom is a single path/selector-only/no privacy type. Thirty (two-digit) codes are available and up to three such intercoms (using three separate pickup keys) may appear at

- 2 -

a station set. The single dial register is shared by the individual intercoms so calls cannot be placed simultaneously, however, there is a time-out on the register similar to that found in PBXs. Since the dial register is shared and does not drop during paging the whole intercom system is tied up in this mode.

3. The station set in this system differs substantially from Bell System sets in the following respects:

- a) Each set comes equipped with a loud-speaker for paging and audible signalling.
- b) Each set has 12 pickup keys plus a hold button and a conference button (total of 14).
- c) Upon replacing the handset all pickup keys are restored.
- d) For an additional cost, a station set may be equipped with an active element privacy circuit. The operation is unique in that such equipped sets are automatically prevented from entering an existing conversation via going off-hook on that line. The excluded party may bridge onto the call if the control station's conference button is depressed. This feature is not applicable to intercom.
- e) The dial may be wired such that outward CO dialing is denied and only intercom is allowed.
- f) The station set requires a single-ended dual amphenol 50-pair cable.

A comparison will now be made between this system and the nearest Bell equivalent.

- 3 -

3.0 PRICE COMPARISON

Although a precise comparison cannot be made because of the differing features of the systems, reasonably compatible approximations to service offerings are possible.

3.1 The Nitzuko System

First, consider the Nitzuko system and postulate the following arrangement:

8 CO Lines
2 Intercom Paths

The number of station sets will be considered the variable and the system will be priced up to 30 stations. In the literature obtained from Nitzuko, little indication is given as to how cross-connects are made; therefore, the assumption is made that the system will need equipment and station backboards similar to that required in conventional 1A2 installations. In Figure 1 an equipment arrangement for a fully loaded system is presented. The following equipment is necessary to implement this system.

Relay Group	\$420.00/system
-------------	-----------------

Similar to a KSU, it has the receptacles for the line circuits and intercom cards. It also includes the dial register for the intercom, switching and a power supply.

CO Line Circuits	190.00/system
------------------	---------------

8 @ \$23.75

Intercom Circuit Cards	40.00/system
------------------------	--------------

2 @ \$20.00

183A2 CO Termination Backboard	6.65/system
--------------------------------	-------------

This price includes one 66-M150 block and eight 10' jumper pairs to the equipment backboard.

- 4 -

184B1 Equipment Backboard

\$ 40.20/system
 + 20.10 over 16
 stations

Since this system has a specific maximum growth, a neat and optimum wiring arrangement can be planned. On the first backboard four 66B4-25 blocks can be mounted and six lines @ 4 pair (T,R,L,LG,A,A1,SIG, SIG GR) terminated. Each block now has the capability of multiplying four station sets. After 16 station sets, another backboard and set of blocks are required. For the last two lines another backboard and three blocks provide all the needed terminations. The price of the backboards include the four 66B4-25 blocks as a standard offering.

185A1 Feature Backboard

5.80/system

Three-pair (T,R,L,LG,SIG, SIG GRD) termination per intercom code are required. Since there is never a need to share intercom codes in this system, 66M1-50 blocks can be used. With this arrangement one backboard per intercom is required.

Connecting Blocks

5.10/16 stations

One 66M1-50 block will terminate 16 intercom stations; therefore a maximum of two blocks per intercom is required. Since there are two intercoms two such blocks per 16 stations are required.

- 5 -

Equipment Cable	\$ 2.17/system
Approximately 5' of 75-pair raw-ended cable is required. This also includes the price of two D-rings.	
Station Sets	80.00/1 station
10T, 12 pickup keys and rotary dial @ \$80.00	
Station Cable	24.80/1 station
This system requires 50-pair single-ended cable. Assume a 75' run; therefore, purchase 100' length to allow for wastage and error in placing.	
Station Backboard	6.30/8 stations
A full backboard (183B1) can accommodate eight 66M1-50 blocks which yields a capacity of 400-pair terminations. Therefore, it can terminate 8 stations.	
Station Blocks	2.55/1 station
One 66M1-50 block can terminate two 25-pair cables or one 50-pair cable.	
Cross-Connect Wire	0.41/1 station
A 3-pair jumper (T,R,L,LG, A,A1) is required per line and a 1-pair jumper (audible signaling) per station set. Assume an average length of 3' per jumper. The price for 3' jumper pairs is:	
3-pair jumper	\$0.04
1-pair jumper	\$0.01
Therefore	
10 PU	= 0.40
Signal Pair	= 0.01

The installation times and prices* are as follows:

Equipment	Equipment Price	Labor Category	Work Time	Work Price
Relay Group	\$420/sys	Mounting	18 min/sys	\$ 5.10/sys
Line Circuits	190/sys	Mounting	4.8 min/sys	1.36/sys
Intercom Cards	40/sys	Mounting	1.2 min/sys	0.34/sys
Equipment Backboard	40.20/sys +20.10 over 16 sta	Mounting +Mounting and Interconnect	8.6 min/sys +17.5 min over 16 sta	2.44/sys +4.96 over 16 sta
Feature Backboard	5.80/sys	Mounting	8.6 min/sys	2.44/sys
Connecting Blocks	5.10/16 sta	Mounting	6.0 min/16 sta	1.70/16 sta
Equipment Cable	2.17/sys	Placing	4.5 min/sys	1.27/sys
		Connecting	165 min/sys	46.75/svs
		Marking	6.28 min/sys	1.78/sys
Station Sets	80/sta	Placing and Marking	9.4 min/sta	2.66/sta
		Mounting	0.9 min/sta	0.26/sta
		Floor Outlets		
Station Cable	24.80/sta	Placing	31.5 min/sta	8.92/sta
		Cutdown	20 min/sta	5.66/sta
		Marking	4 min/sta	1.13/sta
Station Backboard	6.30/ 8 sta	Mounting	4.3 min/8 sta	1.22/8 sta
Station Block	2.55/sta	Mounting	0.5 min/sta	0.14/sta
Cross-Connect Wire	0.41/sta	Connect	34.1 min/sta	9.66/sta
		Testing	8.0 min/sta	2.27/sta

* Work times are taken from "Customer Telephone Systems Techniques for Estimation of Installed Price," by F. M. Fenton, W. L. Haun, J. E. Kilguss, and J. H. Lebrun of Department 3225. Work price is calculated by multiplying the work time by 1.8 to account for support and then applying the 1970 labor rate of \$9.44/hour.

- 7 -

This data is shown plotted in Figure 2 as total installed price vs station set size.

As mentioned earlier, a precise comparison between this system and what is available from the Bell System cannot be made. However, two offerings will be examined which closely approximate the service offering of the Nitzuko system.

3.2 Bell System Offering #1

The first system to be considered is one which is available today. The service offering will be

8 CO/PBX Lines

2 Single path/no privacy/selector-only intercoms

To get the intercom capacity beyond 19 station codes the 1A2 424 KTU cannot be used and we must resort to the 1A1 207C KTU and as many 216B KTU transfer digit circuits as necessary. The required equipment is as follows:

Apparatus Mounting	\$ 30.60/system
--------------------	-----------------

One 16C wall-mounted unit
will be required per system
to contain the equipment.

Apparatus Mounts	67.20/system
------------------	--------------

One 584D panel will accept
the line circuits and provide
fusing as well.

Power Supply	138.00/system
--------------	---------------

To handle the current requirements for the large number of lamps in the fully loaded system a 29B1 wall-mounted supply is needed.

Interrupter	9.95/10 stations
-------------	------------------

One KS-19175L1 interrupter
is required per 10 stations

185A1 Feature Backboard	5.80/system
-------------------------	-------------

Same requirements as in
previous system

Connecting Blocks	\$ 5.10/16 stations
Same requirements as in previous system	
Station Sets	100.31/1 station
630D1 rotary dial equipped with 12 buttons. Price also includes one KS-8109, L2 buzzer	
Station Cable	24.80/1 station
Same requirements as in previous system	
Station Backboard	6.30/8 stations
Same requirements as in previous system	
Station Blocks	2.55/1 station
Same requirements as in previous system	
Cross-Connect Wire	0.41/1 station
Same requirements as in previous system	
Power Cord	1.08/system
One P40J329, 6' power cord is required.	
Power Straps	2.60/system
Twenty-four straps of AM186A of average length 5'.	
Equipment Cable	9.76/system
One 5' A75A single ended cable is required for the 584D panel and one 5' 75 pair raw-ended cable for the intercoms.	

- 9 -

Line Circuits**\$172.80/system**

Eight 400D KTUs are
required.

Intercoms

There are two independent
intercoms; therefore

Two - 207C KTU

109.80/system

Two - 216 B KTU per
10 stations in excess
of 9 stations

30.80/10 stations
for stations >9

Mounting Brackets

6.45/system

Two 99B bars are required
to mount the intercom KTUs

184B1 Equipment Backboard

40.20/system

Same requirements as in
previous system

+20.10 over
16 stations

183A2 CO Termination Backboard

6.65/system

Same requirements as in
previous system

As before, the system installation prices are now derived.

Equipment	Equipment Price	Labor Category	Work Time	Work Price
16C App Mountings	\$ 30.60/sys	Mounting	12 min/sys	3.40/sys
584D Panel	67.20/sys	Mounting	3 min/sys	0.85/sys
29B1 Power Supply	138.00/sys	Mounting	10 min/sys	2.83/sys
Power Cord	1.08/sys	Placing & Connecting	15 min/sys	4.25/sys
Power Straps	2.60/sys	Connecting	45.6 min/sys	12.92/sys
Equipment Cable	9.76/sys	Placing Connecting Marking	4.5 min/sys 175.2 min/sys 8.04 min/sys	1.27/sys 49.62/sys 2.28/sys
Line Circuits	172.80/sys	Mounting	4.8 min/sys	1.36/sys
207C Intercoms	109.80/sys	Mounting	7.0 min/sys	1.98/sys
216B Digit Transfer KTU	30.80/10 sta >9 sta	Mounting	7.0 min/10 sta >9 sta	1.98/10 sta over 9 sta
99B Bars	6.45/sys	Mounting	4.0 min/sys	1.13/sys
Equipment Backboard	40.20/sys +20.10 over 16 sta	Mounting	8.6 min/sys +17.5 min over 16 sta	2.44/sys +4.96 over 16 sta
CO Termination Board	6.65/sys	Mounting	14.4 min/sys	4.08/sys
Interrupter	9.95/10 sta	Wiring Mounting	30.4 min/sys 2.3 min/10 sta	8.60/sys 0.65/10 sta

Equipment	Equipment Price	Labor Category	Work Time	Work Price
Feature Backboard	5.80/sys	Mounting	8.6 min/sys	2.44/sys
Connecting Blocks	5.10/16 sta	Mounting	6.0 min/16 sta	1.70/16 sta
Station Sets	100.31/1 sta	Placing & Marking	9.4 min/1 sta	2.66/1 sta
		Modification to add a Buzzer	10.0 min/1 sta	2.83/1 sta
		Mount Floor Outlets	0.9 min/1 sta	0.25/1 sta
Station Cable	24.80/1 sta	Placing	31.5 min/1 sta	8.92/1 sta
		Cutdown	20.0 min/1 sta	5.66/1 sta
		Marking	4.0 min/1 sta	1.13/1 sta
Station Backboard	6.30/8 sta	Mounting	4.3 min/8 sta	1.22/8 sta
Station Blocks	2.55/1	Mounting	0.5 min/1 sta	0.14/1 sta
Cross-Connect Wire	0.41/1	Connect	34.1 min/1 sta	9.66/1 sta
		Testing	8.0 min/1 sta	2.27/1 sta

In Figure 3 is shown the physical equipment configuration of this system and in Figure 4 the total installed price as a function of station size is presented.

Some comments should be made on the particular differences between these two systems:

The Nitsuko System has

- a) automatic restore buttons
- b) paging
- c) flashing lamps on intercom
- d) capacity to add another intercom for a nominal price.

The Bell System offering can easily grow to greater station capacity.

3.3 Bell System Offering #2

There will soon be available to the operating companies new equipment that is pertinent to this comparison. In particular, this equipment is a new two-link, 36-code intercom. This new design will be able to provide privacy, flashing lamps, add-on conference, etc., for a very attractive price. Further, it takes advantage of "Modular Panels" which is an equipment arrangement which substantially reduces labor expenditures as well as equipment expenditures.

The following equipment is required in this system:

620A Modular Panel	\$ 49.00/sys
--------------------	--------------

One 620 panel can accept eight 400Ds. It comes complete with a 3.5-foot cable that on one end is factory prewired to the panel and equipped with a plug to insert in the power supply on the other end.

Line Circuit	172.80/sys
--------------	------------

Eight 400Ds @ \$21.60

Power Supply	160.00/sys
--------------	------------

New power supplies are being designed for this arrangement. They come complete with built-in interrupters.

183A2 CO Termination Backboard	6.65/sys
--------------------------------	----------

This board can terminate 100 CO jumpers and the given price includes one 66M1-50 block and eight 10' jumper pairs to the 620 panel.

- 13 -

623A Modular Panel	\$ 49.00/sys
Mounts the common equipment for the intercom.	
Intercom Common Equipment	140.00/sys
One 441A @ \$75.00 424A @ \$65.00	
624A Modular Panel	49.00/12 sta
Mounts 12 station circuits for the intercom.	
Intercom Station Circuit	68.00/3 sta
One 442A 8" PWB contains three station circuits	
Equipment Cable	5.80/sys over 24 sta
Over 24 stations an equipment cable is required.	
Dial Code Extender	28.00/sys over 19 sta
Over 19 stations one 444 KTU dial extender is required.	
Station Set	58.06/1 sta
830A1M 10-button rotary dial sets may be used since there is only one intercom button. This price also includes a KS-8109,L2 buzzer.	
Station Cable	12.10/1 sta
One 25-pair single-ended cable which is purchased in 100' lengths and has an average run of 75'	
Station Backboard	6.30/16 sta
One 183B1 backboard can term- inate sixteen 25-pair cables	

- 14 -

Station Blocks	\$ 2.55/2 sta
----------------	---------------

One 66M1-50 block can terminate two 25-pair cables

Cross-Connect Wire	0.37/1 sta
--------------------	------------

9 PU @ 0.04	\$0.36
-------------	--------

Signal Pair	<u>0.01</u>
-------------	-------------

	\$0.37
--	--------

184B1 Equipment Backboard	20.56/16 sta over 4 sta
---------------------------	----------------------------

One board similar to the previous system's configuration is required per 16 stations after four stations are exceeded. This price also includes 5' of 25-pair raw-ended cable to interconnect backboards.

Equipment	Equipment Price	Labor Category	Work Time	Work Price
620A Panel	\$ 49.00/sys	Mounting	5 min/sys	\$1.42/sys
400D	172.80/sys	Mounting	4.8 min/sys	1.36/sys
Power Supply	160.00/sys	Mounting	5.0 min/sys	1.42/sys
CO Backboard	6.65/sys	Mounting	14.4 min/sys	4.08/sys
623A Panel	49.00/sys	Mounting	5.0 min/sys	1.42/sys
Intercom Common Equipment	140.00/sys	Mounting	1.2 min/sys	0.34/sys
624A Panel	49.00/12 sta	Mounting	5.0 min/12 sta	1.42/12 sta
442A KTU	68.00/3 sta	Mounting	0.6 min/3 sta	0.16/3 sta
Equipment	5.80/over	Connecting	2.4 min/over 24 sta	0.08/sys over 24 sta
444 KTU	28.00/over 19 sta	Mounting	0.6 min/over 19 sta	0.17/sys over 24 sta
Station Set	58.06/ 1 sta	Placing & Marking	9.4 min/1 sta	2.66/sta
		Modification to add a Buzzer	10.0 min/1 sta	2.83/sta
		Mount Floor Outlets	0.9 min/1 sta	0.26/sta
Station Cable	12.10/ 1 sta	Placing	31.5 min/1 sta	8.92/sta
		Cutdown	10.0 min/1 sta	2.83/sta
		Marking	4.0 min/1 sta	1.15/sta
Station Backboard	6.30/ 16 sta	Mounting	4.3 min/16 sta	1.22/16 sta
Station Blocks	2.55/2 sta	Mounting	0.5 min/2 sta	0.14/2 sta
Cross- Connect Wire	0.37/sta	Connecting	29.7 min/sta	8.41/sta

Equipment	Equipment Price	Labor Category	Work Time	Work Price
Equipment Backboard	\$ 20.56/16 sta (over 4 sta)	Mounting & Inter-connecting	14.3 min/16 sta (over 4 sta)	\$4.05/16 sta (over 4 sta)
		Testing	8.0 min/sta	2.27/sta

Figure 5 shows the equipment arrangement of this system fully loaded, and Figure 6 shows the total installed price as a function of station size.

4.0 CONCLUSIONS

A comparison has been made between the 1030 System available from Nitsuko and two Bell System offerings. The first Bell System offering requires the use of some 1A1 vintage KTUs to achieve the capacity of the Nitsuko system. Further, it offers fewer features and has a higher installed price. The second Bell System offering will be available to the operating companies in approximately a year. The features of this second offering and Nitsuko are more comparable with the following exceptions:

1. The Nitsuko System can only grow to a fixed line size because of common equipment limitations and station set pickup limitations; only the latter restriction applies to the Bell System offerings (see Figure 7).
2. The Nitsuko station set has "automatic restore" keys; this feature is not available in any Bell System station set.
3. The Nitsuko system requires one pickup key per intercom up to a maximum of three intercoms (since they all share the same dial register calls cannot be placed simultaneously). The Bell System intercom is a two-link arrangement which only requires one pickup key (it also has only a single dial register). Besides providing all the features available from Nitsuko, it has several more, including privacy, CO conference, add-on transfer, direct station selection and off-premises capability. Simple paging could be

- 17 -

added, but it was not designed into this system and addition of it would be awkward. However, a hands-free answering arrangement is available which the Nitsuko system cannot provide.

4. Strictly CO conferencing in Nitsuko seems to be accomplished by simple bridging. This is a practice which we frown on because of transmission losses.*

The system comparisons thus far have been made on the basis of line and intercom services. This was to insure as true a comparison as possible; however, two features in particular merit discussion. These are "Music-on-Hold" and "Paging".

1. Music-on-Hold

In the NITZUKO system, this feature is provided on a system basis for a total uninstalled price of \$74.00. It is a self-contained unit which serves up to twelve CO lines and allows for an external music source to be used or its own internal music box.

The Bell System also has a Music-on-Hold feature provided by the 109A interconnection unit at a price of \$30.00/line. This unit does not provide its own music source, it merely provides the customer with an 8 Ω termination to which he can attach his own music source. Further this unit was designed on a per line basis. There is no reason to assume that a unit couldn't be designed to provide this feature on a package system basis and be competitive.

2. Paging

The NITZUKO system provides this feature as a matter of course with intercom service.

This feature is not designed into either of the the Bell System offerings but could be provided

* K. J. Roberge, "Why Direct Bridging of CO or PBX Lines Is An Undesirable Practice," September 1, 1971, Case 38897-31.

- 18 -

most gracefully within the framework of the second offering. Assuming that the necessary contacts are available in the intercom common control (which they would be if paging was specified as a design criterion) the following equipment would be needed:

1 Amplifier @ \$50.00
 1 620 Modular Panel @ \$49.00
 2 422B KTUs @ \$30.00
 1 44A KTU @ \$28.00

and a speaker (@ \$6.20) for each station set,
 for a total uninstalled price of

$P = \$6.20 \times (\# \text{ of stations}) + \$187.$

This arrangement provides the same grade of service as the NITSUKO system and requires the least redesign effort. A cheaper system probably could be made if it were incorporated into the intercom rather than patched on.

The important result of this study is that with the introduction of the second Bell System offering we will be more than competitive with the Nitsuko system (see Figure 8). That each system is optimized around a different set of features is not surprising. The question to be resolved is, "Which system provides the most desirable combination of features to the customer?". Perhaps AT&T marketing can provide the answer.

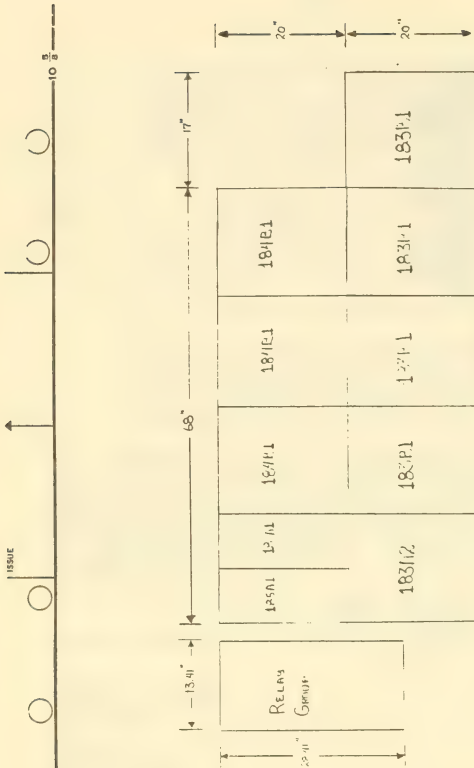
F. M. Fenton
 F. M. FENTON

DR-3225-FMF-ees

Att.
 Figures 1 through 7
 Attachment I

Copy to
 See next page

Copy (with att.) to
Messrs. S. E. Bush
K. Goldschmidt
J. L. Kilguss
H. D. Klein
J. H. Lebrun
R. V. Lohmiller
J. K. McGowan
D. G. Patyk
G. E. Saltus
J. L. Simon
A. E. Spencer
N. D. Weber



Equipment Assembly for Relay Group, 184 and 183

Fig. 1

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G-1842-A (10-63)

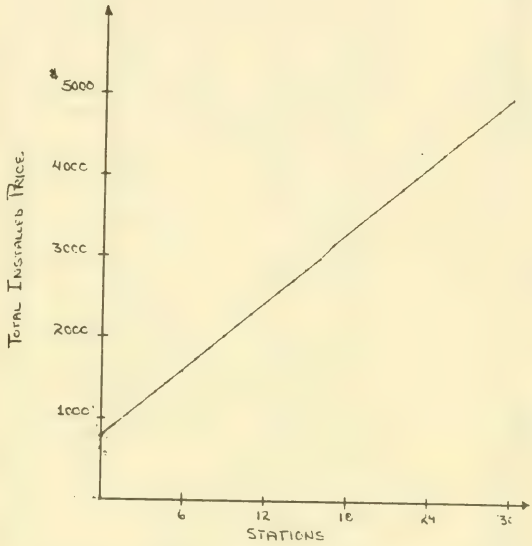
ISSUE

ENGR
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FNF

TITLE

BELL TELEPHONE LABORATORY
INCORPORATED

NO. OF SHEETS 1 OF 1



TOTAL INSTALLED PRICE of NITSUNA SYSTEM

FIG. 2

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10122-A-1 (6-65)

ISSUE

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DRAWN
F.H.F.

TITLE

BELL TELEPHONE LABORATORIES
INCORPORATED

NO. OF SHEETS PER SET

SHEET

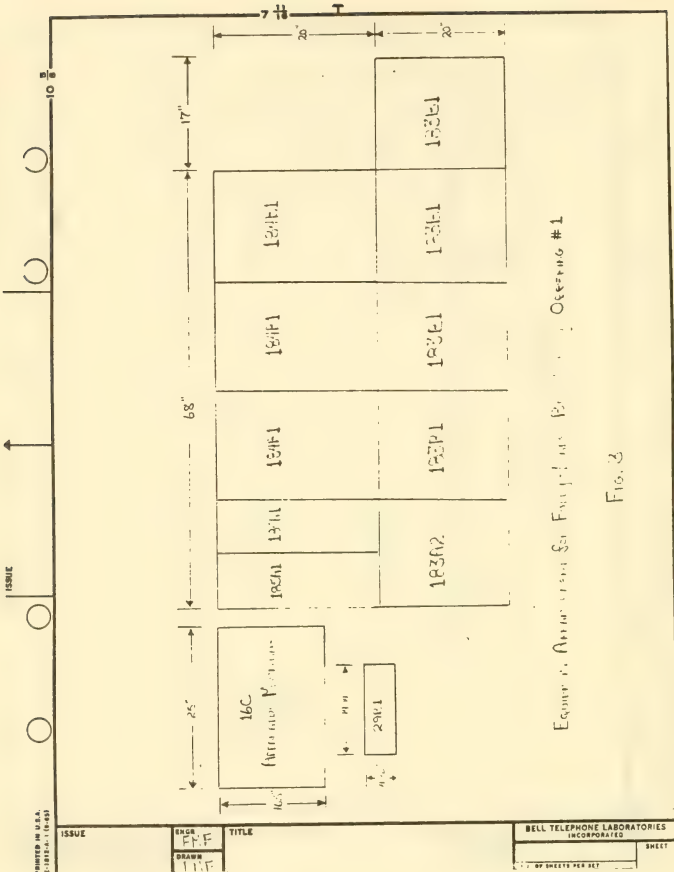


Figure 1. Automatic Voltage Regulator, Opening #1

FIG. 3

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CARTON 10-000

ISSUE

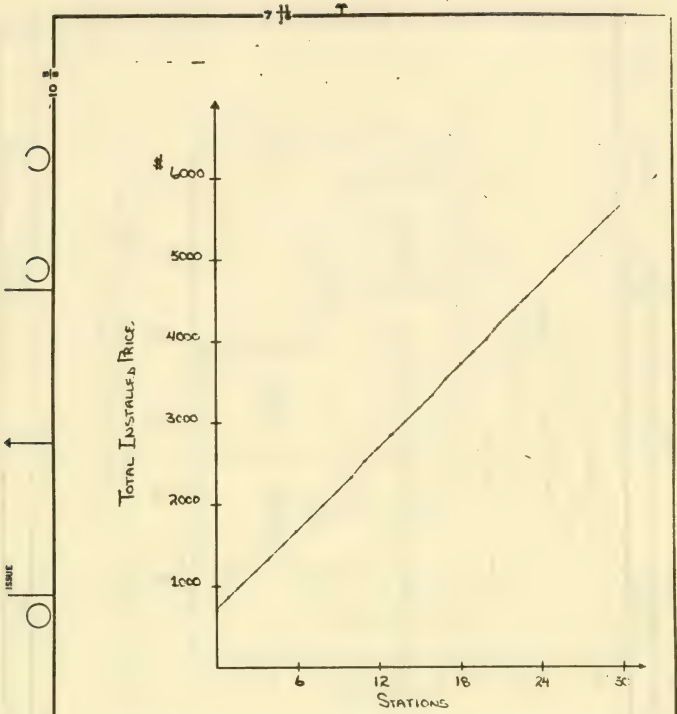
ENGR
F.F.F.
DRAWN
T.T.F.

TITLE

BELL TELEPHONE LABORATORIES
INCORPORATED

OF SHEETS PER SET

SHEET



TOTAL INSTALLED PRICE OF BELL SYSTEM OFFERING #1

FIG. 4

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E-1812-A-1 (6-53)

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ENGR

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DRAWN

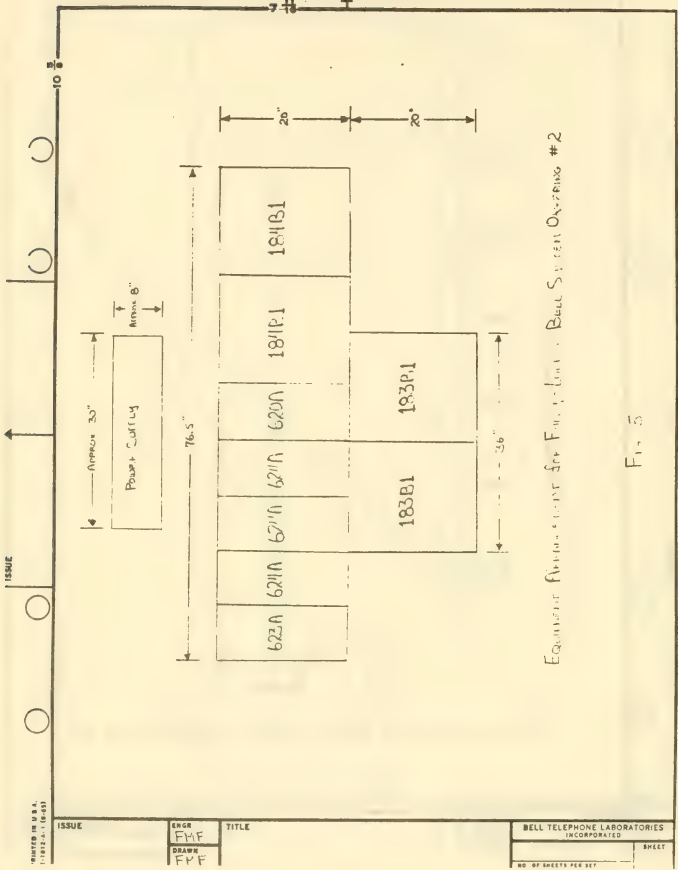
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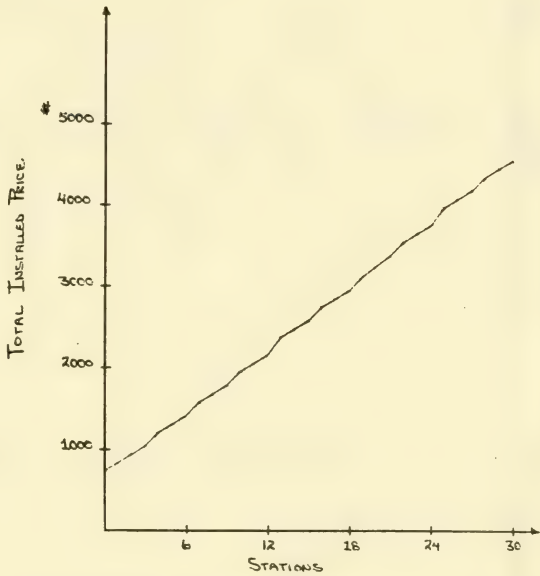
TITLE

BELL TELEPHONE LABORATORIES
INCORPORATED

NO. OF SHEETS PER SET

SHEET





TOTAL INSTALLED SYSTEM PRICE OF BELL SYSTEM OFFERING #2

FIG. 6

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E-1802-A-1 (5-23)

ISSUE

ENGR

FME

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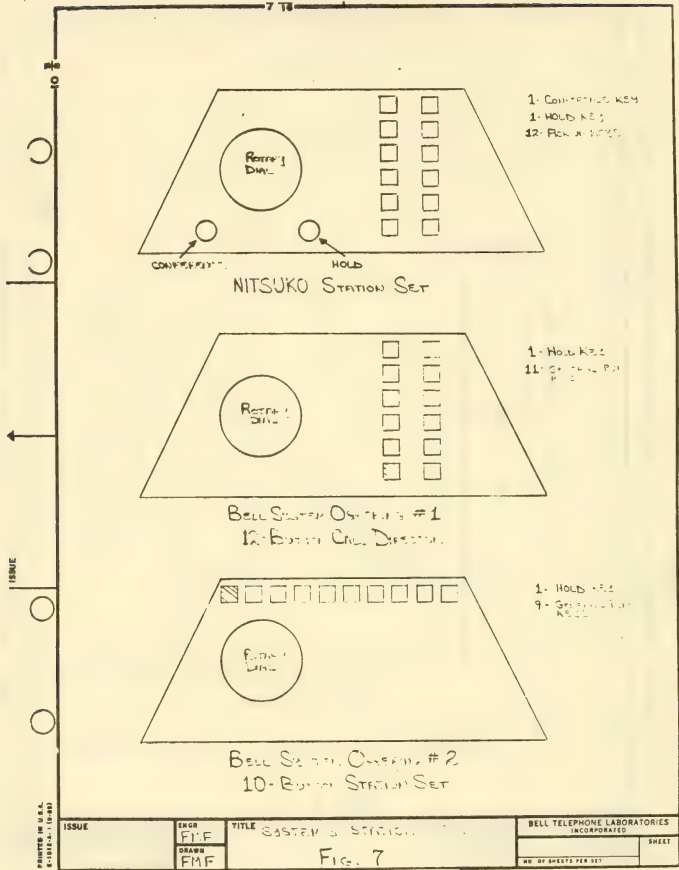
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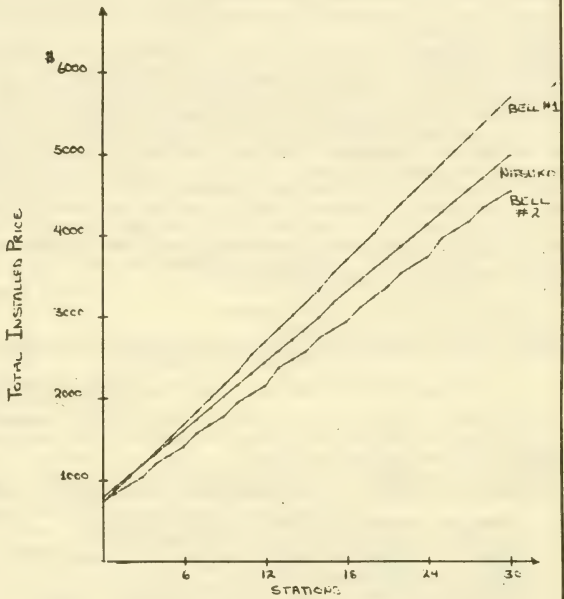
TITLE

BELL TELEPHONE LABORATORIES
INCORPORATED

SHEET

NO. OF SHEETS PER SET





THREE SYSTEM COMPARISON

FIG. 8

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C-1812-A-1 (2-50)

ISSUE

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F.F.F.

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F.F.F.

TITLE

BELL TELEPHONE LABORATORIES
INCORPORATED

NO. OF SHEETS PER SET

SHEET

EXHIBIT 2.—A.T. & T. Memo Comparing Cost of Com-Key 718 With Basic Nitsuko System

JANUARY 13, 1973.

DEAR MR. SCHIAVONI: Current installed cost for the basic 10A Communications System (718) is about \$300 higher than the estimates presented to the CPC. Instead of coming in \$100 under the basic Nitsuko system, its now \$200 over the Nitsuko. Representatives of BTL are at Kearney today to review Western's costs and prices. BTL seems to think that about \$100 can be shaved off Western's prices.

Labor costs included in BTL study are based on CTS Installation Study data. We understand, however, that labor elements included by Service Cost people in developing revenue requirements are somewhat higher and are based on inputs from Plant Costs people. We will be reviewing the labor elements with the Service Costs people who will be in Denver today and tomorrow.

In connection with the pricing of this system we understand that Western has indicated that the price of the basic 10A Communications System will be less than the Nitsuko. Experience with other systems which have been artificially lowered to meet initial price objectives has not been good. If demand does not materialize subsequent bulletin costs are increased to reflect actual costs. Tariffs which are based on initial costs then become uncompensatory and are hard to change. Any commitment from Western regarding prices for the 10A System should be a firm commitment not only covering the initial pricing structure but future pricing as well.

C. J. NICKELSEN.

EXHIBIT 3.—New Jersey Bell Telephone Co. Memo Re Negotiation Guidelines, Package Rate Introduction

I PACKAGE RATE INTRODUCTION—LESS THAN PACKAGE FEATURES

On the effective date, customers will be billed the new "package rates" for Key Telephone Service, but in fact may not have all of the features which are included in the monthly package rate.

The following conditions may then be encountered.

A. Customer is billed the illuminated line charge (LBM) at \$3.00 per line, but:

1. Lines are not equipped for wink holding operation.
2. Lines are not equipped for line holding operation.
3. Lines are equipped for busy line or incoming intermittent or continuous line operation only, but not both.
4. Six button stations are not equipped with lamps.
5. Six button stations are not equipped with holding button.
6. Stations do not have six button sets, but rates for six button sets apply.

B. Customer is billed nonilluminated line charge (LBW) at .50 per line, but:—

1. Lines are not equipped for line holding operation.
2. Six button sets are not equipped with holding button.

C. Customer is billed a manual intercom charge (NJC) at .75 per location equipped for manual intercom service and/or local signaling, but:—

1. System does not have a manual intercom line—signals only.
2. Signals and/or buzzers are missing or inadequate at some locations where charge applies.
3. Some locations do not pick-up manual intercom lines—but six button set charge is being billed.

RECOMMENDED NEGOTIATION PROCEDURE

On and after the effective date of the change to "package rates," negotiators should be guided by the following.

1. When any customer request is received for the addition to, move, change, or disconnection of existing key stations:—the negotiations, quotation of charges, and issuance of orders should be confined to the customer request.

The negotiator should not initiate discussion of the "package rates," the features included in the rate, nor offer to add missing features.

2. Customer requests for an explanation of the "package rates" and/or features included should be confined to the package rates and features applicable to that customer's existing key system. Do not stimulate changes.

If such explanations result in a customer request for addition of missing features—the established nonrecurring charge for such work should be quoted and added to the KS order for other work done or a KS order issued for such additions if the only work being done.

3. Company-initiated contacts—particularly those involving outside consultants or competitive situations should include an explanation of the "package rates," the features included, and a recommendation to add missing features or other changes based upon developed need. Established nonrecurring charges will apply. KS orders should include the additions or changes agreed upon.

4. For all new key systems negotiated on new connects or "T" orders—the "package rates," features included, and options must be explained.

All features available under the "package rates" should be provided and exceptions avoided.

The above preceding guidelines have also been given to all Plant Installation and Repair Forces.

EXHIBIT 4.—*Letter From Department of Public Utilities of New Jersey
Re Com-Key 718 and 1434*

STATE OF NEW JERSEY,
DEPARTMENT OF PUBLIC UTILITIES,
Newark, N.J., November 9, 1973.

Re: New Jersey Bell Telephone Co.—Com Key 718 and 1434 Systems (Docket 738-668).

LEONARD J. FASSLER, Esq.,
Fassler & Oestreicher, Esqs.
280 North Central Ave.,
Hartsdale, N.Y.

DEAR MR. FASSLER: The Board reviewed your detailed letter of October 1, 1973 concerning the above tariff filings made by New Jersey Bell Telephone Company. After weighing the information contained in your letter it was decided to permit the tariff in question to become effective.

In determining whether to suspend the effective date of the tariff and conduct hearings as you requested, the Board considered the question of its jurisdiction over the telephone interconnect industry with respect to operations in New Jersey. Any hearings on the tariff would involve, among other things, detailed examination into the extent of the Board's regulatory powers over the industry. Further, to properly evaluate the merits of your contentions, such hearings would be practicable only upon the expressed representation that your clients would submit to this Board's jurisdiction.

The Board would be forced to review all costs associated with equipment and service of New Jersey Bell Telephone Company and all other companies engaged in the telephone interconnect industry.

Very truly yours,

RADPH C. CAPRIO,
Secretary.

FASSLER & OESTREICHLER,
Hartsdale, N.Y., October 1, 1973.

Mr. RALPH C. CAPRIO,
Secretary, Board of Public Utilities Commissioners,
Newark, N.J.

Re: Docket 738-668 (Com Key 718 and 434).

DEAR MR. CAPRIO: By petition dated August 24, 1973, the New Jersey Bell Telephone Company (hereinafter "N.J. Bell") filed for a proposed tariff with respect to its Com Key 718 and 1434 Systems. The requested effective date of the tariff is purportedly October 11, 1973. This firm has been asked by several companies doing business in the State of New Jersey (including

Executone/N.J., Inc., Telephone and Sound Sales, Inc., and Communications Design, Inc.) to protest the petition filed by N.J. Bell with respect to the above requested tariff. We feel it appropriate to inform you that it is our clients' position, and we join in that position, that the proposed tariff is not consistent with other tariffs requested by the Bell system, and is directed at creating a non-competitive situation in the area of key telephone equipment. Accordingly, the purpose of this letter is to request a suspension of the requested tariff until formal hearings can be held.

In support of this request we wish to bring to the Commission's attention the following:

1. The New York Telephone Company (hereinafter N.Y. Tel) filed tariff requests with the New York State Public Service Commission for a 9 and 19-button key system. The equipment used in the New York filing by N.Y. Tel is substantially the same as the equipment used by N.J. Bell in the Com Key 718 and 1434 systems. The Com Key 718 and 1434 systems are, however, far more complex than the 9 and 19-button systems filed for in the State of New York. N.J. Bell, nevertheless, in this Com Key 718 and 1434 filing, requested a tariff substantially lower than the tariff filed for by N.Y. Tel. in the State of New York.

2. The installation charges set forth in the proposed tariff are completely unrealistic and are not related to the actual installation charges to be incurred by N.J. Bell with respect to the installation of the proposed equipment. In fact, the installation charges are substantially less than those proposed by N.Y. Tel in its 9 and 19-button key-phone tariff, although the actual installation costs of the Com Key 718 and 1434 systems will be far greater because they are far more complex than the 9 and 19-button systems filed in New York.

3. Upon information and belief, the costs and charges compiled by N.J. Bell with respect to its equipment installations do not include N.J. Bell general overhead and profit. Accordingly, there must necessarily be cross-subsidization of equipment installation by New Jersey Bell's general and residential customers through toll and other charges. It is our analysis that the installation charges are completely unrealistic and should be at least double the amount requested in the tariff.

4. The proposed tariff is presented with two options: (a) a monthly charge for service and facilities to continue as long as the Com-Key facilities are in service; and (b) a two-tier contract for three, five or eight years, during which time a customer pays a fixed monthly rate, and then a variable rate for the life of the contract. Nowhere in the proposed tariff does N.J. Bell state the terms and conditions of the contract between itself and the customer. Accordingly, the following questions must be answered:

- (i) What are the terms and conditions of the contract?
- (ii) What penalty does the customer have for termination of the contract prior to its term?
- (iii) What are the "variable rates" to which the customer is subject?
- (iv) Will the customer be explicitly informed in the contract and otherwise as to the penalties for early termination?
- (v) Will the customer be informed by contract and otherwise as to the parameters of the "variable rates" to which the customer is subject?
- (vi) What are the ramifications, costs and charges of the customer's "trading up" to larger and more sophisticated telephone systems to meet the customer's increased needs?
- (vii) Will the customer be informed by contract and otherwise that his 718 or 1434 Com-Key is not interchangeable with another system, and that a complete new installation will be required to provide additional service? What will the charges to the customer be for such changes?

5. It is our opinion that N.J. Bell's introduction of the Com-Key 718 and 1434 at the requested tariff would quickly lead to a scrapping of existing key telephone equipment at a huge cost to N.J. Bell. We take this position because the sheer economics of the requested tariff would encourage present key telephone users to call for a change in equipment to take advantage of the lower tariff (without even considering that the new systems provide many new features not available in existing N.J. Bell key equipment). The scrapping

costs would be paid by N.J. Bell's general and residential customers, and the new equipment would necessitate new costs for which bond financing would doubtlessly be pursued. We feel that we should have an opportunity, upon formal hearing, to examine N.J. Bell's presentation with respect to scrapping, and to examine the reasons for the introduction of these low anti-competitive tariffs, which will encourage the scrapping of existing equipment at a huge cost to N.J. Bell. These costs and expenditures would, of course, be ultimately borne by the general public. It appears to us that existing key telephone users would be encouraged to change over to the Com-Key 718 and 1434 for the principal reason of taking advantage of the tariff specifically pegged at an unrealistically low level to discourage competition. The low tariff, will, however, be subsidized by N.J. Bell's general and residential customers and the public.

6. We believe that the presentation by N.J. Bell with respect to the requested Com Key 718 and 1434 on a per station basis is an improper approach to this particular tariff request. We believe that the request should be made on a per system basis. The customer is, in fact, using a total system. The tariff should be established based upon the total cost of equipment, installation, overhead, profits, etc. The equipment is not "stand alone" equipment; it operates as part of an entire key telephone system. Accordingly, the costs and expenses of all elements of this system should be included in the development of the tariff.

We wish to assure you that our clients and the telephone interconnect industry in general believe that this tariff filing is of extreme importance. We feel that an extremely low tariff request has been made (at great cost to N.J. Bell and to the public) in order to eliminate competition in the telephone equipment field. To permit such a tariff would, in fact, have a serious adverse and unfair effect upon our clients and upon telephone equipment suppliers generally. The general and residential customers of N.J. Bell and the public will have to make up the difference between losses sustained as a result of this tariff (if approved). We feel that it is proper for N.J. Bell to compete with independent telephone equipment suppliers, but that they should compete based upon tariffs fairly developed and adequately supported. We also feel that the New Jersey Public Utilities Commission should encourage competition in the telephone equipment area, as it is only competition that will lead to innovation and improvement in the telephone equipment field.

Our clients maintain that the petition filed by N.J. Bell herein does not reflect its true costs. In this regard our clients ask the following question: How is it possible for the New Jersey Bell Telephone Company to reduce rates on equipment such as the Com Key 718 and 1434 systems while it is common knowledge that equipment costs and installation expenses generally have been going up in a price and inflation spiral? The answer is obvious: N.J. Bell is arbitrarily reducing its equipment prices to eliminate competition. It is also obvious that the people that will pay the true costs of this anti-competitive type of subsidization is the residential telephone customer through increases in toll and other charges. What is happening here is an arbitrary anti-competitive lowering of equipment rates and a collateral increase in telephone line and other charges.

In view of the serious matters raised herein, we respectfully request that a formal hearing be ordered with respect to the matters raised herein and, in particular, with respect to the Com Key 718 and 1434 proposed tariff; that the proposed tariff be suspended and not put into effect pending the hearing; that we be given an opportunity to examine the production costs, installation costs, research and development costs, marketing costs, sales and service training costs, scrapping expenses, and all other costs incident to the introduction of the Com Key 718 and 1434 system at the hearing; and that we have such other and further relief in behalf of our clients as may seem just and proper under the circumstances.

We do wish to state to the Commission that upon formal hearings we will retain New Jersey counsel to assist with respect to the preparation and presentation of our clients' position in the above.

Very truly yours,

LEONARD J. FASSLER.

EXHIBIT 5.—A.T. & T. Statistical Data on Competitive Analysis—Key, 1972

I. Lost revenue:

January	10,431
February	16,963
March	19,560
April	26,060
May	25,977
June	19,945
July	24,322
August	34,818
September	35,646
October	30,310
November	34,812
December	40,926

Total lost monthly revenue—1972 319,770

II. DECISION FACTORS, PERCENT OF TIMES THAT THE REASON IS MENTIONED IN LOST CASES

Reasons	January-July	August	September	October	November	December
Price	50	66	57	65	56	58
Features	17	13	27	38	18	25
Ownership	6	5	6	16	11	7
Maintenance		4	4	3	7	0
Availability	1	2	2	2	2	0
Other	24	17	24	15	18	10

III. CUSTOMERS LOSSES BY LINES SIZE, PERCENT OF LOST CASES

	January-July	August	September	October	November	December
9 lines plus					12	10
8 lines	28	21	18	16	6	10
7 lines	10	8	12	8	13	12
6 lines	14	15	17	17	10	14
5 lines	13	19	15	11	22	33
4 lines	16	17	17	23	17	14
3 lines	10	9	13	13	10	14
1 and 2 lines	9	11	8	12	10	3

IV. MANUFACTURER, MONTHLY ANALYSIS OF CASES LOST TO SPECIFIC MANUFACTURERS

	July	August	September	October	November	December
Nitsuko	13	19	32	6	15	19
TIE	16	28	9	14	37	39
Nippon	9	5	13	10	5	11
Litton	3	5	7	10	14	16
Arcata ¹		24	17		19	19
Iwatsu/Shimcom	16	20	22	19	15	42
ITT	31	37	25	38	44	54
Stromberg Carlson	12	21	13	12	8	10
OKI/Plessey	2	4	4	1	1	3

V. VENDOR, MONTHLY ANALYSIS OF CASES LOST TO SPECIFIC VENDORS

	July	August	September	October	November	December
Arcata ¹	26	30	29	21	32	42
National Tel.	16	24	29	21	17	53
Litton	2	9	11	11	10	9
ITT	6	6	3	9	14	14
InterTel					21	16
UBC	9	3	1	5	1	5
UCS	6	10	4	8	3	3
Gulf States						14

¹ Arcata was reported as a manufacturer but is actually one of the leading vendors. We estimate that 50 percent of these are Nitsuko systems. We also believe that TIE, Litton and Nippon are all importing Nitsuko systems.

KEY—COMPETITIVE CASES, TOTAL 1972

	Won	Lost	Total	Percent lost
New England.....	93	170	263	65
New York.....	163	315	478	66
New Jersey.....	71	80	151	53
Pennsylvania.....	63	54	117	46
Chesapeake & Potomac.....	27	210	237	89
Southern.....	162	130	292	45
South Central.....	120	113	233	48
Ohio.....	76	73	149	49
Michigan.....	337	205	542	38
Montana.....	26	15	41	37
Wisconsin.....	9	9	18	50
Illinois.....	290	126	416	30
Northwest.....	111	72	183	39
Southwest.....	292	343	635	54
Mountain.....	201	237	438	54
Pacific Northwest.....	170	56	226	25
Pacific.....	254	104	358	29
Southern New England.....	173	145	318	46
Cincinnati.....	0	3	3	100
Total.....	2,638	2,460	5,098	48

KEY—COMPETITIVE CASES, DECEMBER 1972

	Won	Lost	Total	Percent lost
New England.....	21	38	59	64
New York.....	33	53	86	62
New Jersey.....	7	12	19	63
Pennsylvania.....	6	7	13	54
Chesapeake & Potomac.....	4	12	16	75
Southern.....	19	14	33	42
South Central.....	12	12	24	50
Ohio.....	9	9	18	50
Michigan.....	36	31	67	46
Montana.....	2	3	5	60
Wisconsin.....	1	1	2	50
Illinois.....	30	16	46	35
Northwest.....	13	5	18	28
Southwest.....	38	42	80	50
Mountain.....	12	36	48	75
Pacific Northwest.....	7	1	8	12
Pacific.....	31	14	45	31
Southern New England.....	19	22	41	50
Cincinnati.....	0	1	1	100
Total.....	300	329	629	52

**EXHIBIT 6.—Minutes of 10A and 12A Communication Systems
Coordinating Group Meetings**

FEBRUARY 7, 1973.

Mr. C. J. NICKELSEN :

Mr. W. SCHIAVONI :

A meeting of the 10A and 12A Communications Systems coordinating group met at Western Electric-Kearny on Tuesday, January 23 to review the status of this project.

10A COMMUNICATIONS SYSTEM

The first working system was on display. This is the system that was displayed at the OVP conference. Jim Simon advised that as the result of testing this system several changes will be made to eliminate undesirable operating characteristics or add to its capability such as:

1. Eliminate clicks which can be heard in receiver when intercom selector is processing a rotary dialed code starting with the digit one. The digit one is used as the transfer digit and in the circuit configuration used applies a ground to the amplifier in the station set. Changes in the voice and tone signaling amplifier, tone generator, preamp and paging amplifier are required. This condition was not picked up earlier because TOUCH-TONE sets had been used in the development work.

2. Provide a timed make interval on the recall key in the attendant DSS console to assure proper operation.
3. Mute the intercom tone and voice signal when station is on C.O. line.
4. Provide background music capability on paging option.
5. Design DSS consoles so that they can be used as a standard KTS optional feature.

Because the equipment prices out about \$300 higher than the initial price objective BTL has reviewed the design to see what could be done to reduce price. The following action has been taken:

1. 454A KTU-Multipath intercom circuit. Change design from a universal 3-path operation to 2-path operation to save about \$35 in price.
2. Eliminate diode matrix presently included in 570A KSU. Diode matrix provides protection against polarity reversals in S & S offices. Two KSU's will be coded, one having the matrix and one without. Hern Goodrich stated that tariffs would be based on KSU equipped with matrix.
3. Change power supply from 29-type (\$134) to 19-type (\$39)—a saving of \$95. This will also reduce overall weight of KSU and permit power supply to be shipped assembled.
4. Use standard fuse panel rather than the specially designed fuse and lamp panel. This will save about \$10 in price.

Western advised that initial prices will be based on 1975 bulletin. W. E. Kearny expects to furnish system costs to staff pricing by February 15.

Ten sets of spare KTU's for the 10 systems are expected to be produced through March.

Repair of common equipment and KTU's will be done at the factory—Kearny. BSRS and RS will not be available until first half 1974. This matter will be reviewed further with Western.

12A COMMUNICATION SYSTEM

The 1434 system was originally coded the 20A Communications System. In an effort to conserve codes it has been recoded the 12A Communications System. The following schedule was presented.

1. Available for Telco ordering—August 1;
2. Prices available—April 30;
3. First system produced—June 30;
4. Training BSP's—July 9.
5. Production: June—1 system; July—2 system; August—5 system; September—10 system; October—20 system; November—20 system; December—20 system; total system—78.

L. D. JENSEN.

6TH MEETING OF THE COORDINATION TEAM FOR THE DESIGN & MANUFACTURE OF THE 10A & 12A COMMUNICATION SYSTEMS

March 22, 1973.

The sixth meeting of the above committee met primarily to assess the competitive posture of the 12A System. The meeting was held at Kearny on 3/13/73.

A plus or minus 10% cost for the 12A System was presented. The price at 14 lines—19 Stations was about \$5,000 installed.

Initial reaction was that this price competed favorably with the 2040, Tie-2 system but did not match the 1030.

Two investigations were agreed upon:

1. A.T.&T. would run a price profile on the 12A system using the \pm 10% estimate, and
 2. BTL would look into a stripped down 12A using 10 button sets to afford a 7-19 thru 7-30 vehicle to compete in the area that 12A does not seem to fit.
- A meeting to discuss these findings is to be held at Kearny on 3/23. A recommendation for the C.S.C. re: the 12A, is the goal of this meeting. C.S.C. meets at Denver on 3/28.

Other topics arose. First, the demand for 10A seems to be rising. Bell of Pa. has guaranteed orders. Pacific Tel wants to get into the act, as well as many other Telco's.

The committee took the following posture: of the systems to be available by Mid July, the allocation is to be as follows: 1 Kearny installation—develop-

ment; 1 Denver—Product Display; 1 Southwest Bell—Training Center; 1 A.T.&T. Sales Display; 80 Phoenix (Mountain Bell) Product Trial; 20 1 per company "hands on" systems.

No other orders will be honored until 8/1/73.

MARCH 22, 1973.

To assess potential order fill from 8/1 on, Marketing, A.T.&T. was urged to get its General Letter out as soon as possible, asking for demand intent from each operating Company.

Since the fate of the 12A System is still not known, A.T.&T. Marketing has not selected a trial Company, nor will further work be done until a decision is made on this system.

The meeting on the 10A Trial is on at Phoenix for 3/21. One item to be discussed is the repair methods for the KSU, KTU, Tel Sets and Consoles.

Iteration of the need for Paging Speakers, both indoor and outdoor, was made. Outdoor speakers are already under KS Spec. Until a KS Spec is written, Kearny will provide speakers in accordance with BTL instructions. Ordering will be for "Speakers for 10A Communication System."

It is the understanding of this Team that Kearny Merchandise will stock and control the 832, 2832, 833, 2833 Tel Sets and the 6A1, 6B1, 7A1 and 7B1 Selector Consoles to conform with the shipments of 10A(12A) Systems.

Finally, a question of the muting feature (voice and tone alert muted when phone is in use) arose. Latest Tel Sets costs include this feature. Design will be modified to provide after the first 50-70 tel sets.

J. J. CONROY.

Approved: W. E. MEDFORD.

6th Meeting—Attendance, March 22, 1973

Name:

Organization

D. Sayles.....	WECo, Kearny.
G. E. King.....	Do.
J. J. Conroy.....	Do.
D. Fagg.....	A. T. & T., 195 Broadway.
J. Ochs.....	Do.
H. Goedrich.....	
S. Bush.....	BTL, Denver.
R. Greenman.....	BTL, Indianapolis.
F. Fenton.....	BTL, Denver.
R. Thompson.....	BTL, Indianapolis.
W. Hardy.....	WECo, Shreveport.
J. Froehle.....	WECo, 195 Broadway.
D. Fogarty.....	WECo, Kearny.
J. Jensen.....	A. T. & T., Denver.
O. Gerkensmeier.....	BTL, Holmdel.

EXHIBIT 7.—Letter from Mr. Hulse to Mr. Schiavoni Re Loss of Key Telephone Systems to Competition

JUNE 13, 1973.

MR. W. SCHIAVONI: We have given detailed consideration to your proposed visits to several Operating Companies regarding Key Telephone Systems. We agree with you that the loss of Key Telephone Systems to competition is a matter of great concern to us at '195'. However, another round of question and answer visits at this time would, in our opinion, be of little value since we already have considerable knowledge of Key System market needs. This information was acquired through numerous previous field visits, market research, continuing contacts with Operating Companies and in-depth analysis of all lost competitive cases. In fact, we've included answers to most of the questions on your agenda based on available data.

Therefore, as an alternative to your proposed visits, we suggest that an AT&T Task Force consisting of Sales Projects, Market and Service Plans, Engineering and possibly Plant be formed to analyze existing knowledge and resources and to formulate an overall game plan to develop a product line strategy for the key market. Marketing is prepared to head up this effort.

The product line strategy should include the products (including a "New Look" telephone set) and systems that the marketplace wants. This strategy, of necessity, must recognize the problems attendant with the phasing out of outmoded services and the protection of imbedded investment. Competitive products, the market, pricing, as well as the existing and future technology should be considered in the development of the product line.

We request that someone from your organization join with Joe Froehle of Sales Projects, Herm Goedrich and Ron Rothenbach of Market and Service Plans and someone from the Plant Department in forming the AT&T Task Force. We believe this team effort will result in a product line strategy that will greatly enhance our competitive position in the marketplace. Further, we are confident that the Operating Companies will welcome a positive forward looking game plan.

Your assistance in this matter would be appreciated.

W. J. RINKOR.
J. E. HULSE.

[Attachment]

KEY TELEPHONE SYSTEM MARKET FACTS

[Material deleted.]

8. What else do you think you can do to reduce losses?

New activities are being reviewed to improve our competitive position from AT&T. We are considering new strategies to improve our market coverage and considering reorganizing our sales and marketing organizations to improve our impact on the marketplace. We are also establishing programs to assist service representatives and other customer contact groups to recognize potential competitive cases. We are also making an indepth analysis of our position on certification.

9. Do you see anything in the future that may significantly alter your ability to compete effectively?

The individual Operating Companies may have individual factors that may affect their ability to compete such as pricing, relations with local commissions, type of market, etc. However, the major items are being considered in the development of a product line such as; overall pricing strategy, competitive products, existing products, overall market characteristics, etc.

10. What can AT&T and BTL do to help you reduce losses and meet competition?

We have surveyed the marketing organizations in the Operating Companies and are coordinating with all departments to determine what actions are necessary to reduce competitive losses. We are currently stressing the development of product/sales strategies and pricing strategies that will enable us to be more competitive and will simultaneously protect our imbedded investment. We have also initiated the actions outlined in question #7 and are currently implementing the activities listed in question #8.

AT&T and BTL need to continue working to develop our new Key Market product line and adding features to the existing 1A2 technology.

11. What characteristics should be considered in developing new designs to serve the key system market?

[Material deleted.]

12. What problems can you foresee with the introduction of completely new key telephone system designs?

Problems attendant with the introduction of new key telephone systems design are: 1. Tariff filing; 2. early retirement of other products; 3. training; 4. inventory.

EXHIBIT 8.—*Letter from Mr. Nickelsen to Mr. Schiavoni Transmitting List of Problems and/or Suggestions for Com-Key 718*

A.T. & T.
June 29, 1973.

1C1.17A

Mr. W. SCHIAVONI: Attached is the list of problems and/or suggestions for Com Key 718 found at the June 6th and 7th meetings in Phoenix. Beneath each

item listed is a brief description of the action that is being taken to remedy each particular situation.

It is surprising and unfortunate that in spite of Plant Operation's and our regulation communication with Mountain Bell, Phoenix, that we were not informed of any of these problems developing. We will work more closely with the people in Phoenix to prevent a similar situation from occurring again. We will also follow up the solutions to these items to ensure that they are being implemented.

Attachment.

JUNE 6TH AND 7TH, 1973 MEETINGS, PHOENIX, ARIZ., PROBLEMS AND/OR
SUGGESTIONS—AND/OR STATUS 6/22/73

1. The quick connect lugs on terminal strips, usually the one associated with a busy lamp console, are frequently reversed.

1A. A process check has been added to the manufacture of the 570A KSU to prevent this from occurring again.

2. The opening in the bottom of the KSU cover is too small to accept 18 station cable for a fully equipped system.

2A. The design calls for a larger cutout to be made, however this had not been done. The cutout is now being made, and BTL is reviewing the size of the cutout since the same cover will be used on the 515 KSU as well.

3. The bolts and wing nuts provided for retaining the station cables entering the KSU are inadequate and cannot contain all of the cables.

3A. BTL admits that the retaining clamp is flimsy, and will come up with a better solution. This should be in production following shut down.

4. A flexible ground lead (Number 6) is needed from the power supply to the base of the KSU.

4A. The ground lead bends each time the gate of the KSU is opened. It is feared that unless this lead is made flexible it may break in time. BTL is reviewing the design and a solution should be in production following shut down.

5. The KSU's are being shipped with two wrong KTU's, the 451A (music-on-hold) and the 457B (paging) rather than the intercom (424A, 460A). The tone generator (455A) and the tone and voice signaling (456A) are okay.

5A. Part of the problem here was that some of the GTU's were being shipped separately from the KSU. Kearny assures us that the proper KTU's are now being shipped with the KSU and are not inserted in the jacks for shipping.

6. Four KTU's that are part of the basic service (424A, 460A, 455A, 456A) should be shipped along with, but not be installed in the KSU.

6A. As in 5A.

7. The threads in the base plate of the KSU that are engaged by the screws that mount the terminal blocks are frequently stripped.

7A. Kearny is working on a new process that will eliminate the need for removing the terminal blocks during wiring. Meanwhile extra care is being taken to avoid stripping the threads in the base plate.

8. Some of the 70 type fuse holders have been broken in shipment.

8A. It was speculated that this may have occurred on units that had fuses 13 and 14 "added on" to an earlier vintage fuse assembly. Nevertheless, the packing of the KSU is being reviewed.

9. The 70 type fuse holders are not labeled or identified.

9A. Kearny assures us that these are now numbered appropriately.

10. The lamp indicators are not labeled or identified.

10A. As in 9A.

11. The serial number labels should be indicated by the addition of the word "SERIAL" and placement should be consistent.

11A. This suggestion will be carried out. However serial numbers will be added to the first 200 units only.

12. The volume control knobs on the speakers should be removed and the volume control should be provided in a manner that would allow the installer to adjust the level and deny this facility to the customer.

12A. This is a good suggestion and a cost reduction as well. A recessed volume control that must be adjusted using a screwdriver will be provided on all speakers being shipped.

13. The retaining bar on jacks 15 through 18 should be spring loaded in the same manner as the jacks 19 through 14.

13A. This suggestion is being implemented now.

14. The KSU should be labeled where it can be seen.

14A. This is a question of the serial numbers of the KSU. The serial numbers are now being preceded by the word "Serial".

15. The systems are being shipped with 400D line circuits that have not been ordered.

15A. This was true only of the very first systems manufactured, and was due to the fact of 100% testing. 400D's are not now being shipped with the KSU.

16. The 424 KTU's are not being serialized.

16A. The 424A is a standard KTU, which is not normally serialized.

17. Some units do not have the "C" battery modification.

17A. This modification was added to eliminate noise in the system. WECO, Kearny and Mountain Bell have agreed that for any units found without the "C" battery modification, Kearny will supply a kit, and Mountain Bell will make the modification. All units presently being made contain "C" battery.

18. The plant people suggested that options could be stenciled on the back of the power supply.

18A. This is an item for study. It was pointed out that the power supply might be changed out, leaving no option information with the installation. The same problem could occur if options were outlined on the inside of the KSU cover. BTL will investigate.

19. The intercom dialing occasionally feeds "POPs" into the paging speakers.

19A. Solution to this problem involves a redesign of the 457 type KTU. BTL has implemented a fix to the unit in Phoenix and will issue information on the new design imminently.

20. Paging access occasionally times out.

20A. BTL is investigating. This may require a design modification.

21. Speakers sound tinny and the baffles look cheap. The Phoenix people are now buying an 8 inch Utah speaker with a more attractive enclosure for about \$12.00. They feel that it performs better than the one they are now being provided and they are not satisfied with the appearance.

21A. Part of the problem here seems to be that Mountain Bell Marketing is selling the Customer different speakers and baffles from those being installed. WECO, Kearny is looking into providing more attractive baffles, and will do so as soon as their stock of 290 is depleted.

22. Shipments arrive with no indication of the contents. Every box must be opened in order for them to discover what is inside.

22A. This problem was being caused by packing several telephone sets in a larger box (overpacking). This practice has been discontinued.

23. They need reduced SD's and CD's for their BSP's.

23A. We do not normally reproduce the SD or CD in the BSP. Mountain Bell is reconsidering this request.

24. They have ordered 80 night transfer kits and to date have received 3. They will have to go back on a few of the installations to add the night transfer key.

24A. This situation has been corrected. The kits are available, and Phoenix has all they need.

25. They have plenty of repair tags on hand but they are uncertain about where the KTU's should be sent for repair.

25A. Kearny agreed to do repair on 7A circuit packs (KTU's) until Repair Centers have been designated and equipped. The 570 KSU repair will initially be at the Denver Service Center. A proposal for routine repair of both KSU's and KTU's is being prepared for Service Center Administration action.

EXHIBIT 9.—Letter to Mr. Schiavoni from Manhattan Engineering Department, New York Telephone, Indicating Number of 400D Key Telephone Units Repaired and Amount Spent.

NEW YORK TELEPHONE,
New York, N.Y., June 22, 1972.

MR. W. SCHIAVONI,
Engineering Director, Customer Telephone Systems,
American Telephone & Telegraph, New York, N.Y. 10007

DEAR MR. SCHIAVONI: Engineering Letter (E.L.) 1521 is a classic example of the ambiguous direction the American Company provides for the Operating Companies. It tells us we may initiate a wholesale changeout of 400D Key Telephone Units (KTU's) and have them modified at no cost under the terms

of General Engineering Complaint (GEC) 0009 if they test good after modification. It does not, however, clarify that this policy be applied to normal returns.

[Indicates number of 400D key telephone units repaired and amount spent]

However, even if they increased the price for repair 400% to that of the new product, our repair costs would have only been \$180,000 or 60% of what we actually paid.

We have been informally advised that Western Electric Company action in charging us repair costs for units covered by the General Engineering Complaint is in keeping with the traditional returns procedures whereby all units, good or bad, incur equal repair costs. The 400D, however, which has gone through 14 issue changes and two G.E.C.'s in six years and as experience indicates has a short service life, is not a traditional product.

We have written Mr. S. M. Grubin—General Manager Northeast Region, Western Electric Company, requesting full credit for all repair costs which they charged us for 400D KTU's which tested good after modification/GEC-0009. We would appreciate your clarifying E.L. 1521 to eliminate a situation which permits Western Electric Company to charge the Operating Companies to correct the deficiencies of this product.

Very truly yours,

MANHATTAN ENGINEERING DEPARTMENT, TECHNICAL SERVICES DIVISION

Subject: Results of Study of 400D KTU Returns.

In May, 1972, we tested 445 400D KTU's which were selected at random from returns to the Western Electric Company Manhattan Service Center. This sample represents 10% of the total returns for April, 1972. The results below indicate that 84% would test good after modification/GEC-0009.

Issue No.	Units tested			Test OK		C relay non-operational or internal A/C A relay contact contamination		Otherwise defective	
	Number	Percent	Total	Number	Percent	Number	Percent	Number	Percent
Issue 7 and earlier	79		18	22	28	38	48	19	24
Issue 8	62		14	31	50	18	29	13	21
Issue 9	43		9	21	49	14	33	8	19
Issue 10	146		33	98	67	30	21	18	12
Issue 11	72		16	53	74	10	14	9	13
Issue 12	43		9	31	72	5	12	7	16
Total	445		100	256	58	115	26	74	16

EXHIBIT 10.—Letter to Mr. Schaefer from Mr. Schiavoni Re Key Telephone System 1973 Projects

AMERICAN TELEPHONE & TELEGRAPH Co.,
New York, N.Y., March 19, 1973.

Mr. J. W. SCHAEFER,
Executive Director, Bell Telephone Laboratories,
Holmdel, N.J.

DEAR MR. SCHAEFER: The 10A and 12A Communications Systems are being designed to meet a pressing need for packaged key telephone system service to effectively compete in the market place. This particular development has diverted significant effort from other key telephone system projects. To identify needed key telephone system effort the attached list of projects has been prepared. This list reflects the priority of projects that have already been requested as well as new ones which are considered essential in order to satisfy field requirements for new facilities and services.

This list of projects has been reviewed with your people and they are in agreement that each one is important and should be assigned development effort. Under present circumstances, however, it is our understanding that

manpower is not available and, therefore, no commitments have been made as to when we can expect these projects to be completed.

I would appreciate your undertaking a review of this project list with the objective of determining when manpower will be made available to complete these needed developments.

Sincerely,

W. SCHIAVONI.

KEY TELEPHONE SYSTEMS, 1973 PROJECTS

MARCH 6, 1973.

[Description of 35 separate projects deleted]

EXHIBIT 11.—*Letter to Mr. Schiavoni from Bell Laboratories Re New Design for Key Set*

BELL LABORATORIES,
Holmdel, N.J., May 24, 1973.

Mr. W. SCHIAVONI,
Engineering Director, A.T. & T.,
New York, N.Y.

DEAR MR. SCHIAVONI: Confirming our telephone conversation on the afternoon of 5/24/73, it is understood that Jake Schaefer and I have agreed to supply to Don Genaro a 6-button key set, a 10/20-button key set, a 30-button CALL DIRECTOR®, and a type-40 console for Don Genaro to use in connection with the design of a series of new pajamas for these items.

It is Jake's and my understanding that you are concerned that part of the losses to outside suppliers in the business area is caused simply by the fact that "our station instruments seem to be the oldest cars in the garage." To reduce the losses from cosmetic aspects as promptly as possible, it is your proposal, and we are agreeing, that it would be of interest to get some renderings and some plaster models made of these station items in new shells, at which point appropriate tri-company approval for going forward can be made.

It is understood that Don Genaro will wrap these new pajamas around present telephone components, much as he did for the Design Line Series, so that we are in a position to put more pleasing designs into the field on a minimum schedule.

[Sentence deleted.]

It is my understanding from Jake Schaefer that Alec Feiner will see to it that a type-40 console gets to Don Genaro as soon as possible, and I am asking Don Leonard to see to it that Genaro receives a 6-button set, a 10/20-button set, and a 30-button CALL DIRECTOR as promptly as possible. It is understood that Don Genaro will work with Jim Ritchey and Alec Feiner's designated representative as needed to produce the appropriate renderings and plaster models.

Very truly yours,

FTZ.

EXHIBIT 12.—*Letter from Mr. Simoneau to Mr. Horak Re New Product Strategy Program for Key Telephone Service*

P.T. & T.,
San Francisco, May 18, 1973.

R. D. HORAK.

This is a supplement to my memorandum of May 11, 1973 concerning new key telephone equipment. I think it would be advantageous to adopt some overall product development goals and objectives in the key telephone market of both a short and long range nature. It is my hope that by developing such a program, we can stay one jump ahead of our competition in meeting our customers' needs instead of in a defensive position, one jump behind, constantly reacting to their competitive thrusts and inroads in our markets. This type of a program requires cooperation and close coordination between our two groups as well as a continuing awareness of what tomorrow's customers will need and want today. We must be able to offer our customers the very latest developments in communication technology and do so on a timely basis and at a reasonable price.

This is mandatory if we wish to survive in today's competitive marketplace.

Your organization is in the best position to technically evaluate outside manufactured systems and hardware as a potential offering and to, on a limited basis, design and develop certain items which are not available in the market today. If we can bring your group's expertise to bear on this problem soon enough, perhaps we can eliminate many of the problems we are experiencing today with other products in trying to meet competition. I think it would be highly profitable to the Company if we jointly defined a New Product Strategy Program and set up goals and objectives to be met with priorities and time frames for their accomplishment.

As we have discussed in the past, I would hope that in working together on this program, we would be able to identify for you a customer need or want and once this was agreed upon, rely on your people's expertise to do the necessary technical research, development, negotiation with outside vendors, etc. to bring this idea to a form suitable for recommendation. This would allow you the latitude to look at several alternatives versus a rigid request limiting you to look at just one vendor or item of equipment.

As a star in developing this Strategy Program, I would suggest that we develop three integrated programs aimed at meeting the following broad objectives:

1. A short term program to be completed within six months that would accomplish the following: (a) Add new features to our existing 1A line of equipment that would match or be similar to the new Com Key 718 system.

(b) Addition of decorator faceplates and other items of equipment.

(c) Addition of a low cost 30 button set perhaps similar in style and concept as our existing 10 and 20 button sets.

2. A mid-term program to be completed within a year aimed at achieving the following objectives.

(a) Supplement our key telephone equipment line with new terminal equipment such as: (1) Integrated hands-free phones that are low in cost, (2) "Top of the line" executive and decorator type sets that are multi-functional in nature; and (3) Special types of key sets aimed at select markets, i.e., integrated sets with busy lamp field, data collection terminals, etc.

(b) New Key Telephone Systems:

(1) The future direction of key telephone offerings will probably take two directions—"packaged" as with the 718 or 1434 and an "unlimited" similar in nature to our existing key service. We need to develop new offerings that will meet customer needs in these two categories and take advantage of the latest technological development. While my market research is scarce on how these systems should be configured, I would guess we might need something like the following spectrum of packaged systems in the future: (a) 3x8; (b) 4x12; (c) 7x18 (Com Key); (d) 14x34 (Com Key); and (e) 20x60. I include the 718 and 1434 here because some outside vendors may offer more attractive equipment (cost and features) in these package sizes than will be available with Com Key.

(2) Evaluate our existing 1A offering to make it more modular and low cost yet at the same time expand its capacity and flexibility for features.

3. A long term program to be completed within five years.

(a) We should evaluate the new hybrid KTS/PBX systems currently coming on the market which combine both KTS and PBX advantages and economies in one system. This is certainly a void in our product line today.

(b) Evaluate various size electronic key systems and related hardware and terminal equipment currently on the verge of being offered by outside manufacturers.

This is perhaps an ambitious program, but it is a necessary one if we wish to stay one jump ahead of our competition. If we can stay ahead of our competition offering new products and services before they can, then we may be able to alleviate many of the regulatory problems and delay tactics we are being hit with today. The key to this entire problem is being a leader in the marketplace, not a follower. We must be able to market our product first. Our historical procedure of waiting for AT&T and Western Electric to develop new products is not going to cut it in today's business environment. It's up to us to take the initiative.

I am looking forward to working with you on this project and hope our meeting on May 30 will be the first step to see such a program implemented.

R. M. SIMONEAU.

**EXHIBIT 13.—Letter From C. R. Williamson to Operating Vice Presidents
Re Purchase of Non-Bell PBX's**

AMERICAN TELEPHONE & TELEGRAPH Co.,
March 17, 1970.

To: Operating Vice Presidents

From: Assistant Vice President—Engineering A

At the recent Operating Vice Presidents' Conference, I discussed our plans for a family of Bell System designed electronic dial PBX systems, and also indicated that I would be sending you some material with respect to PBX's of other than Western Electric manufacture.

A number of the Operating Companies have expressed interest in the use of non-Bell PBX's to meet service commitments. Attached for your information is a letter describing the arrangements which have been made whereby Western Electric will purchase PBX's of other than their manufacture for the Operating Companies when requested to do so. Also covered is service feature and capacity information for non-Bell PBX's for which information is available.

C. R. WILLIAMSON.

Attachment.

AMERICAN TELEPHONE & TELEGRAPH Co.,
New York, N.Y., March 30, 1970.

To: Engineering Staff Heads

From: Engineering Director—Customer Telephone Systems

Subject: Purchase of Non-Bell PBX's

Synopsis: Transmits service feature and capacity information on PBX's of other than Western Electric manufacture and describes arrangements for Western to purchase for the Operating Companies.

At the Chief Engineers' Conference in November, 1969, and the Operating Vice Presidents' Conference in February, 1970, plans for a family of Bell System designed electronic dial PBX systems were discussed. The 800A and 101 ESS are currently available and both the 805A and 810A will be in production in the 1971-1972 period. In addition, a new 200 to 300 line system, called the 801A, is under study with expected availability in 1971.

It is our understanding that a number of the Operating Companies are interested in non-Bell PBX systems to meet service commitments. In this connection, arrangements have been made for Western Electric Company to purchase PBX's of other than Western manufacture for the Operating Companies when requested to do so.

Among the many factors to be considered regarding the use of non-Bell PBX's are:

- traffic capacity of trunks, switching network, common control, etc., at quoted line sizes,
- adequate and continuing documentation,
- equipment reliability,
- transmission performance,
- growth and feature flexibility,
- training for installation and maintenance forces,
- operation and administration.

The attachment to this letter contains service features, line and trunk capacities and physical size data for non-Bell PBX's for which information is available. The data has been obtained basically from manufacturer's sales literature and we do not represent with certainty that all figures are accurate. We intend to distribute this information in a loose-leaf binder in the near future and, to insure distribution control, these will be numbered. The information will be kept up to date.

It will also be distributed by the Western Electric Company to Service Manager's organizations at Service and Regional Centers. The Western Electric Company Customer Service Organization at Service or Regional Centers will provide additional information such as price, availability, and detailed technical data, on request.

The Western Electric Company is prepared to purchase non-Bell PBX equipment on a Telephone Company Engineered basis if requested by the Operating Company in accordance with standard procedures applying to com-

mercial products. When the Operating Company places a TCE order on Western, the Purchasing Organization will contact the non-Bell manufacturer to negotiate F.O.B. terms and other conditions. Provisions for spare parts, repair, installation, maintenance and service, etc., can also be included in the negotiations. The Pricing Organization will furnish prices.

If you have any questions or comments, Matt Pungarchar on 212 393-8138 will be available to discuss them with you. In addition, would you please, at your earliest convenience, advise him of the number of permanent binders you wish and the address of your distribution point.

This letter is also being sent by Mr. C. R. Williamson to a special mailing list.

W. SCHIAVONI,
Engineering Director.

Attachment.

EXHIBIT 14.—A.T. & T. Task Force Report Re Key Telephone Service Losses

TASK FORCE REPORT

Visits were made to four operating companies by J. D. Jensen—AT&T, Assistant Engineering Manager, Customer Switching Systems and R. J. Andrews—BTL, Head, Business Communications Systems Studies, to determine why we are losing key telephone service customers and to identify possible corrective actions.

The companies and dates visited are: New York Telephone—July 3, Southern Bell—July 6, Pacific Telephone—July 10 and Illinois Bell—July 12, 1973. Attendance lists are attached indicating the representation from Engineering, Plant and Marketing organizations in each company. The companies were notified in advance of specific question or discussion topics which form the structure for the following material.

HOW MUCH ARE WE LOSING AND WHAT ARE THE TRENDS?

About half of the competitive cases are lost but at present these losses only amount to 1-2 percent of the total inward movement in key telephone service customers. It is not likely that this volume even comes close to canceling out the net annual gain in key service. However, the trend is of concern in that the cumulative total of lost customers and associated revenue is increasing at a 200 percent compound interest rate. The following table summarizes available data. The average annual revenue per lost customer varies from \$1000 to \$1700.

TABLE I.—LOST CUSTOMERS AND REVENUE

	Lost cases	1970		1971		1972		1973 (estimate)	
		Cus-tomers	Revenue	Cus-tomers	Revenue	Cus-tomers	Revenue	Cus-tomers	Revenue
System.....		440	\$830,000	990	\$1,750,000	2,460	\$3,840,000	7,500	\$8,000,000
New York.....	0.53			290		1,064			
Southern.....	.47			40	75,000	127	237,000	330	550,000
Pacific.....	.64					93	128,000	300	440,000
Illinois.....	.38					141	215,000	267	414,000

WHAT ARE THE PATTERNS OF LOSSES?

[Material deleted.]

SOUTHERN BELL LOSSES AND WINS (1972)

[Material deleted.]

ILLINOIS BELL LOSSES

[Material deleted.]

TABLE II

LOSSES IN CUSTOMER INDUSTRIES

[Material deleted.]

TABLE III

The patterns of losses with respect to types of station sets predominantly used by the lost customer vary significantly between companies and generally can be identified as the result of tariff differences. Southern Bell's losses are concentrated in [deleted] Pacific Tel has a fairly recent and apparently competitive tariff for 10 and 20 button sets. Illinois Bell has a low rate (\$2.50/mo) for 6 button sets but the rate for all larger multibutton sets is the same (\$12.00/mo). A new tariff, pending approval, will establish different rates for the larger sets.

STATION TYPES USED BY LOST CUSTOMERS

[Material deleted.]

TABLE IV

Why are we losing?

Many lost customers have already signed a contract with a vendor before the operating company learns of the case. All companies were vitally concerned with this phenomenon and have taken or are considering appropriate actions. The incidence of presigned losses is: N.Y.—68 percent, So.—15 percent, Pac.—60 percent and Ill.—60 percent.

Price or a combination of price and features are the most frequently recorded reasons customers give for dropping Bell key service. The vendors include additional features at close to the same or lower price. Where a customer desires a nonstandard Bell feature, the vendor seems to be able to provide it promptly.

The vendors appear to aim at specific gaps in a given company's tariff. Illinois Bell has a wide rate spread between 6 and 10 or more buttons. Pacific Tel. has developed and submitted tariffs covering Toll Restriction and Paging but the commission has denied Toll Restriction and Paging is still pending. N.Y. Tel. is having trouble obtaining approval of their proposed tariff covering 10 and 20 button sets.

Special assemblies are often required to meet customer requirements in competitive cases. However, the charges tend to be noncompetitive since reuse cannot be assumed and the labor costs tend to be large. Since such arrangements are nonstandard, the intervals for a price quotation and subsequent installation tends to be unacceptable to the customer.

Vendors appear to have flexibility to vary prices to reflect advantageous installation conditions or to reduce their profit for selected customers. The operating company must hold their price consistent with published tariffs.

Federal and local ad valorem taxes are theoretically applicable to all owned equipment but tend not to be collected on customer owned equipment. They tend not to be offset by the interconnect fees, especially for large systems. In addition, the commissions are being prompted by intervenors to require fungibility factors in rates for new products. This term applies to the requirement on the new product to assume the obligation of unrecovered investment resulting from stimulated changeouts of previous products. Other reasons which are mentioned by lost customers include payment options such as large initial fees which are attractive to customers obtaining government financial aid. Poor experience with Bell service is also mentioned and includes reliability of service, billing accuracy and service responsiveness. Some customers elect other equipment as a result of their own corporate affiliation with an equipment manufacturer or vendor.

What new features are most requested by customers?

The service features which are most frequently identified by lost customers are those planned or under study for the 7A and 14A communications systems. Toll restriction is also frequently mentioned but is not currently available for application with key equipment. Vendors can provide this feature as needed with separate devices. In discussing features, all companies stated a need to have the new features available with existing equipment.

Corporate considerations contributing to losses

Included in this category are such factors as managerial policies, organization, tariffs, constraints encountered as the result of being a regulated corporation and other similar considerations.

1. Inadequate market coverage—no planned visits to key system customers to stay abreast of customer communication needs. Customer signs contract with vendor before we know about his interest in updating service. Also, little sales promotion of key telephone service through advertising media.

2. Tariff considerations—

No filed tariff on 10- and 20-button sets—when sets were introduced there was no competition. TELCO concerned with impact on existing sets (protection of investment).

Not so much tariffs per se, but rather the inability to offer alternative pricing arrangements—two tier, front end load, lease-purchase, maintenance contract.

Out of date tariffs reflecting higher equipment prices than present prices—results in higher rates.

Tariffs that reflect current costs—many tariffs have been based on averaging—now forced to support tariffs with facts by commissions and intervenors.

Inclusion of federal and local taxes (excise, state message, and municipal) in rate base adds to TELCO costs. Customer avoids such taxes when communications equipment is purchased.

3. Slow response to TELCO needs—developments (new and improvements) require too much time.

4. Inadequate market research—little evidence that Bell System engages in real market research. We react to competition but seldom lead in new customer features and service.

5. Bell System does not gamble on new services or features—must have well defined market.

6. Inadequate manpower—customer needs for interconnection facilities are met promptly, why not give TELCO the same service.

7. Protection of investments leads to failure to innovate and develop new products and services.

8. Sales personnel not always aware of options and special assemblies that might be offered to meet competition—insufficient interdepartmental communications.

9. Commission relations—commissions concerned over impact of new features and services on TELCO's existing investment (service life). TELCO record keeping often inadequate with respect to service life of key equipment.

Programs initiated to minimize losses

In each of the meetings an attempt was made to identify specific activities that have been undertaken to counter competitive penetration in the key telephone systems area. Some of the more significant activities that have been initiated are enumerated below.

1. Looking at non-Bell products—telephone sets in particular.

2. Improved program of market coverage, advertising and sales material.

3. Staff support of salesmen—lease-buy evaluation, cash flow analysis.

4. Hot line telephone campaign—craft personnel alerted to customer interest in non-Bell equipment calls centralized marketing number with information. Marketing then dispatches sales person to follow up.

5. Remove all inside wire and cable when customers goes non-Bell—forces competitor to install cable.

6. Mass mailing to key system customers—geared to encourage customer to call TELCO before making decision.

7. Prompt response to special assembly requests—30 days to complete design, develop revenue requirements, establish tariff, determine installation date and advise customer.

8. Establishment of Technical Services Division provides support to Plant and Marketing in competitive cases.

9. Local development of four-line package.

10. Educational program to acquaint Plant craft forces with facts of competition and what it means to them.

11. Emphasize advantages of Bell System maintenance.

12. Tariff review to establish separate tariffs for CALL DIRECTOR, 10-20 button sets and externally mounted keys.

13. Development of competitive reporting systems to identify characteristics and patterns of losses.

14. Interdepartmental V.P. level competitive action council established to review competitive problems, solutions and policies.

15. Centralized competitive marketing group organized. Personnel diverted from less productive and important work assignments to achieve a "task force" response to competitive situations.

Future considerations that may affect your ability to compete

In discussing this topic an effort was made to elicit future considerations that could significantly influence the companies' ability to compete effectively in the market place.

1. Failure to develop new features and services.
2. Certification.
3. Attestation.
4. Regulatory attitudes and rules.
5. Proliferation of intervenors in rate cases can delay commission decision.
6. In the growing competitiveness of the customer equipment market there is evidence that some vendors are retrenching. In some instances it also appears that vendors may be willing to quote less than actual installation costs to get the business.
7. Sale of used equipment by vendors at lower prices than quoted for new has started in the PBX field.

What assistance can AT&T and BTL render to reduce losses

This question was included in the agenda to find out what recommendations the companies could offer where AT&T-BTL assistance would help them to reduce losses. Their responses tended to be directed more towards general policy and administrative considerations rather than specific equipment and service needs which is covered in a later section of this report.

1. Need AT&T lobby to make state commissions aware of property tax loss.
2. Evaluation of vendors products for possible systems use.
3. Improve performance and reliability of existing products (400D).
4. Develop effective strategy for introduction of new products.
5. Review new developments with companies so that they know what is going on.
6. Reduce development intervals.
7. Become more innovative—use new technology.
8. Establish ongoing market research programs—TELCOs reply on AT&T.
9. Evaluate and disseminate promptly information, including costs, on competitive products—this will permit sales personnel to respond intelligently when competitive products are encountered.
10. Size of key telephone system business requires more support.
11. Get step ahead of competition.
12. Centralized review and consultation of special assemblies and standardization when indicated.
13. Consider need for and importance of backward compatibility in the development of all new products.
14. Procure products that work—cost reductions often lead to field problems that aggravate customers and make them more inclined to consider competitive systems. Don't eliminate field trials but find ways of conducting testing more effectively.

What characteristics should be considered in developing new designs?

The companies' response fell into two general areas, i.e., customer service features and equipment engineering and operating considerations.

A. Customer Service Features

All the companies want all the features which are currently involved in losses and are planned for the 7A/14A communications systems. In addition, some standard means to provide toll restriction with key equipment is desired. Other service features suggested were

1. Auxiliary headset jack assembly for all multibutton sets.
2. Portable multibutton set.
3. Capability of associating toll charges with stations (AIOD).
4. Secretary to have means to store the numbers to be called by her boss with individual buttons or short codes.
5. A button to redial the last call dialed (Norelco).
6. Visual indications and remote release of hold for off-premise stations.
7. Decorator designs for multibutton sets.
8. Key system ringing synchronized with CO ringing.
9. TOUCH-TONE dialing in a rotary dial CO.

10. Conferencing CO lines with Intercom.
- B. Equipment, Engineering and Operating Characteristics
 1. Nonilluminated, 2-line system with electrical hold.
 2. 3-4 line system with selected new features and low cost set.
 3. Quickly installed packages.
 4. Busk indicator (LED) on KTU pack.
 5. Indicating type fuses.
 6. Alarms on power unit fuses.
 7. Indicator of recent low voltage.
 8. Flat cable for undercarpet use.
 9. Compatibility with line status verification operation.
 10. Improved diagnostic documentation.
 11. Flexibility or compatible KTU building blocks for special assemblies.
 12. Ability to provide individual features per customer.
 13. Compatibility with TAS to extinguish lamps.
 14. Forward and backward compatibility.
 15. Improved physical designs—space, reliability, etc.
 16. Miniature pullable cable connector.
 17. Reduce number of cable conductors.
 18. Improved regulation of power supplies.

New key telephone system introduction problems

In discussing the development and introduction of new services and features, it was recognized that the companies may have to contend with local problems of such a nature that System consideration should be given to them. Two areas of concern, somewhat interrelated, were repeated in most all the meetings, namely, tariffs and accelerated obsolescence of existing equipment. On the general subject of tariffs, it developed that where formerly the principle consideration was satisfying the commissions that the rates were not too high, a secondary consideration has been introduced with the advent of vendors in that the vendors do not want them low. Vendors, therefore, are intervening with increasing frequency. Commissions are being forced by virtue of the intervenors, to obtain detailed supporting documentation from the companies which in turn is available to the vendors for examination.

The introduction of any new equipment has always affected the life of existing equipment. The introduction of new features and services has often been inhibited because of the accelerated obsolescence factor associated with new facilities. The early obsolescence factor caused by the introduction of new equipment was of significant consideration to all of the companies and one which may have to be included in service cost studies.

General

During these meetings, many considerations associated with competition, losses, tariffs, services, features were discussed.

The following points received special emphasis.

A. All companies commented strongly on the poor field performance of the 400D KTU. In some instances, they indicated it may be a factor in competitive cases.

B. The need to be innovative and exercise leadership in developing new products and services which the companies expect seems to be contrary to the need to protect our existing investment. Somehow, we have to find a way to achieve these dual objectives.

C. The telephone companies are not equipped or organized to engage in basic market research. The identification of new features and services they look upon as an AT&T responsibility.

Of particular interest was the emphasis placed by each company on a different facet of the general subject of key system losses. The points of emphasis are covered as follows:

NEW YORK TELEPHONE CO.

Special assemblies are a vital part of competition. This emphasis may be due in part to the fact that 5 of the 8 New York representatives at the meeting were from the Engineering Department. There was, however, no disagreement on the part of the Marketing and Plant representatives. Suggest that a centralized organization be established to respond to special assembly requests from all companies. Although special assemblies are needed to respond to competitive situations, the telephone company must recover all costs in the

rate quoted the customer because there is little or no reuse of such assemblies.

The need to protect the investment in existing apparatus was discussed at some length. This seems to be a very real consideration not only on the part of the telephone company but also on the part of the commission. The commission is interested in knowing how new products will affect the life of existing products. Vendors intervening in rate cases and new tariff filings claim that the effect of a shortened service life in existing products should be recovered in rates established for new products.

There was little to indicate during the discussion that the New York Company felt new multibutton telephone sets were needed to meet competition. On the other hand there was a strong indication that we need to get ahead of competition.

SOUTHERN BELL

Southern Bell was particularly critical of the fact that we have generally offered key system customers basic service, i.e., pick-up, hold, illumination, button sets and intercom. No exotic facilities and services have been made available to customers. When is the Bell System going to start leading the market, become more innovative and use new technology?

New style sets are not needed—no cases have been lost on account of telephone set styling. If new key system features dictate a new telephone set—OK. But don't design a replacement for existing multibutton sets just to change style.

Special assemblies receive little attention. Generally, take 3-5 months to respond to customer special assembly requests. Salesmen have no authority to obtain commitment on special assembly.

Tariffs are not a factor in losses. Features of 7A and 14A should be made available as individual key system options for use with existing sets and apparatus. Don't need packages.

PACIFIC TELEPHONE

Special assemblies are not a significant factor in competition nor are tariffs since Pacific Telephone's tariff is the third lowest in the system. Some special assembly activity is required but does not seem to be a competitive factor.

Not sure how much use will be made of packaged systems. All 7A communications system features should be made available as individual key systems options.

New products will affect existing tariffs. We need judicious tariffs. If we don't make new services and features available someone else will.

Bell System "trademark" is a great asset. Can compete effectively with a 15-20 percent price differential.

Considering local development of a 4-line package for less than 10 stations. Features have not been defined but will use present sets.

Although no direct comments were made concerning the need for new telephone set styling they did indicate that non-Bell products were being looked at.

We must respond faster with new products but don't eliminate field trials—find ways of determining product performance faster—need more laboratory testing.

Decisions to abandon developments should be reviewed with telephone companies.

ILLINOIS BELL

When we come out with a new product it obsoletes old product. Make new facilities compatible with existing products and also make sure that they work.

New telephone set styling not a major consideration in present competitive environment—don't need new jacket on 6-button set. The effect of new products on existing products must be recognized. We either have to protect our investment or learn how to write off this investment. AT&T service costs people considering introducing a factor in cost studies to account for displaced investment.

AT&T needs to look at special assemblies critically.

Six-button set market unhurt by competition—CALL DIRECTOR market is where competition exists.

Do not need features of 7A System as individual options.

R. J. ANDREWS.
J. D. JENSEN.

KEY TELEPHONE SERVICE LOSS MEETINGS

CONFEREES

New York Telephone Co.—July 3, 1973

J. A. Bandelt—Plant
H. J. Christensen—Eng.
W. G. Dopman—Eng.
D. W. Kessner—Eng.
J. H. Krebs—Mktg.
T. G. Morrison—Eng.
A. L. Neale—Eng.
O. C. Rosenberger—Eng.
R. J. Sweeney—Mktg.

Southern Bell—July 6, 1973

G. Crotts—Plant
B. E. Durham—Eng.
J. C. Edwards—Mktg.
L. Manning, Jr.—Eng.
D. R. Quattlebaum—Mktg.
A. W. Ringer—Eng.
T. Smith—Com'l

Pacific Telephone—July 10, 1973

R. E. Anderson—Plant
H. R. Dodd—Mktg.
W. Dorris—Plant

J. J. Gallagher—Sales

R. D. Horak—Eng.

W. Kahl—Sales

R. L. Kost—Sales

J. A. Rauzon—Eng.

R. M. Simoneau—Mktg.

P. F. Webster—Sales

Illinois Bell—July 12, 1973

B. R. DeMaeyer—Eng.

J. P. Hofstra—Eng.

M. R. Jepson—Mktg.

P. D. Lattner—Eng.

W. A. Lockhart—Rates

E. C. Marienfeld—Plant

K. G. McGuire—Plant

R. E. Murray—Eng.

J. J. O'Connell—Mktg.

J. L. Preston—Eng.

J. E. Quinlan—Eng.

G. R. Scott—Rates

G. F. Tannery—Planning

G. S. Zillis—Eng.

BELL LABORATORIES,

July 20, 1973.

Subject: Key Service Losses Task Force—
Southern Bell

CONFERENCE NOTES

The meeting with Southern Bell was held in Atlanta, Georgia, on July 6, 1973 (attendance sheet attached).

There was general agreement with AT&T views on why we are losing. Southern Bell indicates 70 percent of losses result from a combination of price and features where the price of a special assembly to provide the feature is not competitive. Another 25 percent of losses are for features which are not available via Southern Bell and 5 percent are for miscellaneous reasons. Some of these result from competitor "gadgets" which are not necessarily good communications features. Southern Bell indicates they did not have a chance to compete on 19 out of 127 (15 percent) cases in 1972.

The volumes and trends of losses are not too severe within Southern Bell growth in business service revenues—some of which resulted from rate increases.

[Material deleted.]

The patterns of losses are indicated in the following tables together with the number of "wins" where the information was available.

[Material deleted.]

The features most frequently listed by lost customers in the order of importance to Southern Bell are:

1. Privacy with ability to add on a station when necessary. The exclusion feature is not adequate and existing special assembly arrangements are not cost competitive.
2. Multiline Conferencing, pop-up buttons are highly desirable but not absolutely necessary.
3. Toll Restriction applicable to individual lines or to individual stations. A device to trigger on 1+ or 0+ dialed codes would be adequate in Southern Bell.
4. Paging including a business interphone type of operation, e.g., hands free answer with voice alerting.
5. Music on Hold.
6. Lower cost, multipath (2-3) intercom for up to 40 stations with flexibility for a common buzzer.
7. Busy Field with DSS is of high utility to customer attendant type of operation.

8. Tone Signaling as a per station option, possibly using tone ringer which can replace a C type bell in the field. The 18 volt alerting signal should be able to enable either a bell, tone or buzzer.

9. Other features mentioned were combined sets, delayed ring and night transfer arrangements.

The discussion on features indicated that the exclusion feature decreases the need for button restoral. There is some customer confusion with terminology between service packages and hardware rates since each customer's features make up his own service package. Southern Bell does not have an automatic dialer at present since the previous Bell version has been M.D.'d. There was a strong plea for ability to sell individual features as opposed to a service package. In addition, there was a consensus that station set styling was, not a competitive problem at the present time.

Corporate considerations affecting key competition were discussed. The tariff structure and regulatory relations are not considered to be a problem at this time. There appeared to be less concern for investment protection since the equipment is assumed to have a "revenue producing life" independent of whether or not it is stimulated out of an individual customer. The rates within the tariff are a problem since the costs on which they are based have not been reviewed for some time. And example is the original cost of \$28 for a 400K KTU that is now selling for \$19.50. Also, the rate for a 6 button set is \$2.15 per month versus \$9.00 per month for a 12 button call director. Recently they have only been updating their rates every three years but are considering going to an "as necessary" basis. In addition, the federal excise tax on station equipment rates is a competitive disadvantage for the TELCO.

Active programs relating to competition within Southern Bell include a competition Action Council at the VP level to review all activities and competitive products. Equipment engineers are actively investigating or developing techniques to add the most important missing features to existing key equipment. They are also looking for economic ways to provide all competitive features for customers less than five lines. In addition, they are looking at ways to assemble equipment packages at the distributing house to reduce installation intervals and costs. They are thinking of high runner equipment packages similar to Pacific Tel. and S. W. Bell, which will not be separately tariffed. The Plant Department is adding amphenol connectors to set cables in the field in order to reduce costs with their subsequent reuse.

As to what else might be done, Southern Bell would like to consider using nonstandard appliques to obtain additional features on the 1A2 system. They know of a sanbor printed circuit board to provide music-on-hold (it preempts leads used for intercom). They have heard that N. J. Bell has a mechanical applique for 6 button sets to pop-up the buttons.

They would like to see a corporate consensus on whether they really have to win every case. To do so will require extra staff overhead to be prepared for special assemblies and crucial short schedules. In addition, they feel a need for improved interdepartmental attitudes to back up the sales force. They feel that operating priorities and philosophies which were appropriate prior to competition need to be severely shaken.

Only one future consideration was discussed. They feel that cost estimates for key equipment may be underestimating field conditions. They recently compared installed costs for the 1A2 and 7A systems and believe the 7A costs will exceed the 1A2 by 30 percent. They found the basic material and installation costs were about even but the station costs were considerably higher for the 7A. In addition, they have to add in a factor for carrying additional set codes. They are concerned about the 7A working behind PBXs where flash is required to recall the attendant and also causes the buttons to pop-up. They feel positive about introducing the 7A at rates compensatory with their cost estimates but are not sure it will have a large market.

Actions for AT&T and BTL to undertake are several:

1. Forward looking marketing research versus analysis of historical data.
2. Additional guidance in interdepartmental relations.
3. Adjustment of an apparent emphasis on new products at the expense of attaining adequacy of existing products.
4. Augmentation of features for existing products via modification or appliques versus replacement with new designs.
5. Centralized coordination of multiple TELCO efforts to augment existing equipment.
6. Reissue of plant practices to remove constraints on installation of paging speakers.

7. Methods or computerized facilities to provide management information on status of customer switching service and operations—"to help analyze where we are."

8. Guidance on how to develop "Sales-Engineers."

9. A time-shared, interactive, computer program to compute total customer charges for any service complement for the salesman while he is on the customer premises.

10. Additional opportunities to discuss and compare competitive marketing problems with other TELCOs, AT&T and BTL.

11. Additional caution and planning in the introduction of any new products. Plans to return design-line sets to Indianapolis for repair and direct mail back to the customer are considered a disaster if repair quality is comparable to experience.

12. Additional thoroughness in verifying the effectiveness of revisions for existing products, e.g., 400D circuit pack washing. There was concern with plans to ship all 400Ds to Charlotte for washing, thus removing accessibility to repair in Atlanta and Miami.

13. In discussing relative priorities there was a proposal to leave the "brush fires" to TELCO engineers and concentrate BTL effort on application of new technology to obtain a "leap ahead" of the competition. It was suggested that with appropriate coordination, the TELCOs could augment existing equipment and obtain "backward compatibility" of new designs with appliques to interface with existing station sets.

Desired new product capabilities are:

1. Incremental feature capability to tailor feature complement per customer needs.

2. Ability to use cheaper set for 3-4 line installation (vs. 7A 10 button set).

3. Consideration of existing customer who wants some new sets or features without having to replace entire system.

4. Attention to space limitations (reference to the Lynch VI system).

5. More than 19 station ability on intercom arrangements.

6. Consideration of new features aimed at reducing customer's administrative functions, e.g., attendant recall.

7. Some way to track toll calls and associate their charges to individual stations.

8. A means to indicate to the key system attendant that a station user has left his location.

9. Keep in mind Telephone Answering Service arrangements so lamps are not left burning.

10. Visual indications and remote release of hold for off premise extensions.

11. Key service attendant facilities similar to a PBX console.

12. Would like to have both forward and backward compatibility with respect to station sets.

13. A button to automatically redial the last call dialed (Norelco).

14. Similar feature to allow a secretary to store numbers her boss should call so he can dial them with a single button or short code.

15. Allow TT sets in a DP central office.

16. Repertory dialers.

17. A line circuit that *works*.

18. Physical designs somewhere between a tank and a transistor radio—better tuned to the operating environment.

19. Improved design and manufacturing quality of initial volume for new products. The 770A has seriously affected Southern Bell's service credibility.

20. Attention to hazards like acoustic shock.

21. Improved reaction time on stop-gap measures.

22. Emphasis on design behind the set. Backward compatibility is important. A new set is not a basic need and should be introduced only if it is necessary to achieve overall economics.

23. Prefer appliques to 1A2 and 6 button sets, e.g., pop-up, as opposed to a new small system, e.g., small 7A.

24. Prefer additional features on existing equipment as opposed to a new package.

25. Can visualize an effective product line based on a small system with fixed features (first three requested earlier) and a large system with full feature capability and flexibility to activate per customer.

R. J. ANDREWS.

ATTENDANCE SHEET, KEY SYSTEM LOSSES—JULY 6, 1973

Name	Company and department	Mail address	Room	Telephone
J. D. (Doug) Jensen	A. T. & T., engineering	Denver		
B. E. Durham	Southern Bell, engineering	Atlanta		
D. R. Quattlebaum	Southern Bell, marketing	Atlanta		
J. C. Edwards	Southern Bell, marketing head-quarters	P.O. Box 2211, Atlanta, Ga. 30301.	1238	
Gene Crotts	Southern Bell, plant	Atlanta	1432	
R. J. (Bob) Andrews	BTL, business commercial systems studies.	Holmdel, N.J.		
A. W. (Al) Ringer	S.B.T. & T., engineering	Room 524, Hurt Bldg., Atlanta.	524	
Lonnie Manning, Jr.	S.B.T. & T., engineering	Room 928, Hurt Bldg., Atlanta.	928	
Trosie Smith	S.B.T. & T., commercial	Hurt Bldg, Atlanta.	1132	

MARCH 19, 1973.

MR. E. D. HOFFMAN,
Director of Pricing.

The attached Memorandum for Record provides the Manufacturing Division information necessary to establish a price for the 10A Communication Systems. It is our view that the costs provided will be attained by January 1, 1975 and will also permit a favorable price relationship with competitors' products. We would appreciate being informed when a final pricing decision has been made.

J. W. HAHN,
Works Comptroller.

MARCH 19, 1973.

MEMORANDUM FOR RECORD

Re: 10A Communication System Costs and Prices

The first objective of this study was to develop a 10A Communication System cost which would meet competition—in this case equipment designated as TIE I 1030 and manufactured by the Nitsuko Company. The second concern was a cost which would permit minimal operating variation losses while providing a challenging manufacturing objective. A third concern was assurance that the 10A Cost bore a favorable relationship to the present Western Electric manufactured vehicle for key switching—the 1A2 System. It is recognized that the 1A2 System is not completely comparable because it lacks the capability to provide many of the features available in the TIE I 1030 and Western's 10A Systems. If possible, it would be desirable to establish one manufacturing cost which meets all three of these objectives.

In order to prepare comparative data a representative sample rotary configuration was developed including the following features for the 10A and 1030 and as comparable a 1A2 System as it was possible to develop: Music on hold, paging, privacy with disable, muting and fuse indicator.

[Material deleted.]

The cost information required by the Pricing Organization for components to develop 10A System prices is as follows:

[Material deleted.]

EXHIBIT 15.—Letter to Mr. Deutschle from Mr. Schiavoni Re 400D KTU Repair Charge

AUGUST 1972.

MR. E. C. DEUTSCHLE,
Western Electric Co.,
New York, N.Y.

DEAR MR. DEUTSCHLE: A matter of continuing concern to a number of the operating companies is the cost incurred by them in returning 400KTUs to Western Service Centers for modification in accordance with the terms of GEC 0009, Supplement 1. Their concern stems from the fact that a substantial percentage of units returned require no repair treatment yet the telephone company is billed the standard repair charge. A copy of a letter from the New York Company regarding this matter is attached.

E.L. 1521 attempted to give the telephone companies an alternative where they might want to engage in the programmed replacement of in service units at locations that have been especially susceptible to intermittent-type troubles. Action under this program requires the units to be specifically identified.

The complain against the overall program is why regular repair charges should apply to those units returned to service centers which only need modification under GLC 0009 and why should the telephone companies be required to specifically identify units for no charge GLC 0009 treatment.

Mr. S. M. Grubin, in response to Mr. L. P. Oberst's letter, stated that regardless of how the Service Center handled the repair charges, the total billing dollars would remain unchanged. Although this may be the case, it does not present an accurate picture to the telephone companies of the actual cost of those units returned to service centers for repair only. We believe that there is a need to change the billing arrangements so that those units which only require modification in accordance with GLC 0009 are excluded from the billing base. This action may result in higher per unit charges but will present a true repair cost picture which will help the companies administer the repair program more effectively.

Will you kindly review this matter and let me know by October 15 whether the proposal to limit the billing of 400D KTUs returned to Service Centers to those which actually require repair treatment is acceptable to your company.

Sincerely,

W. SCHIAVONI,
Engineering Director.

EXHIBIT 16.—*Memo from E. E. Headington Re 551B Key Service Unit Fire Analysis*

BELL LABORATORIES,
October 24, 1973.

ENGINEER'S NOTES

I. INTRODUCTION

A severely burned 551B Key Service Unit has been received from Michigan Bell Telephone Co. We were asked to examine the unit and comment on possible causes of the fire. These notes summarize the results of that examination.

II. DISCUSSION

The burned 551B Key Service Unit (KSU) was received from Michigan Bell Telephone Co. Included with the unit were a report of the "On Site" investigation made by M. A. Stringes, Michigan Bell, and 16 pictures of the fire site and the KSU before disassembly. By the time we received the unit, the Power Supply had been removed and sent to WE, Kearny, for evaluation.

It is obvious from an examination of the unit that an intense fire occurred within the KSU. The cause of this particular fire, however, if it was within the KSU, is extremely difficult to ascertain. In our investigations to date, we have uncovered some potential shorting problems, but it will be shown in the following paragraphs that it is unlikely that any of these problems cause this fire.

It has been noted that the wiring cable connecting the quick-connect block with the equipment components, on at least one 551B KSU (not the one in question), has been frayed, leaving some of the conductors exposed and free to contact the circuit pack mounting framework. This could cause a shorting condition. With the Power Supply outputs properly fused, however, the appropriate fuse should blow before a fire hazard condition is created.

Another source of possible shorting has been noted when the Power Supply Cord grommet is improperly mounted. If improperly mounted, a pulling force on the power supply cord can pull the grommet out of the KSU hole and partially disconnect the power cord. When partially disconnected, the Power supply plug pins are exposed, and vulnerable to contact with the metal housing of the 551B KSU. If the customer's power source is properly fused, however, this condition should not cause any fire hazard.

Both of the above mentioned conditions will be eliminated by the 551C KSU. This unit is currently under development at WE, Kearny. It is made of plastic instead of steel, and has no hinged area for a cable to pass. All interconnections are accomplished with surface wiring on a flat backplane.

The 400D line circuit has been thoroughly investigated to determine if it presents any fire hazard when exposed to lightning or other large voltage surges. No hazard has been found. Circuits up to Issue 13 did contain a 16G transistor which could fail in a catastrophic mode and possibly cause a fire. This was changed in Issue 14 however, and KTUs in the field are being modified with a new transistor as they are recycled through the Service Centers. An investigation of the burned KSU revealed, however, that the line circuits in the KSU did not have the dangerous 16G transistor.

III. CONCLUSION

In summary, although we have determined some areas in some 551B KSUs which can cause potential shorting problems, we can find no cause for a fire in this particular KSU.

E. E. HEADINGTON.

EXHIBIT 17.—*Letter from Mr. Schiavoni to Mr. Corgan Re Key Telephone Systems Funding for Controlled Introduction of New Products*

NOVEMBER 12, 1973.

Mr. W. G. CORGAN,
Western Electric Co., Inc.,
New York, N.Y.

DEAR MR. CORGAN: The introduction of new customer products into the Bell System generally involves some kind of field evaluation to determine their ability to perform satisfactorily in the field environment. This evaluation can be made through Bell Laboratories field (technical) trials or, more recently, through a procedure that is called "controlled introduction". In the case of technical trials the cost of the product to be tested is borne by Bell Laboratories. Such products may be assembled by Western on preproduction facilities under a Bell Laboratories order, or by hand assembly by Bell Laboratories. In either case the product field trialed does not generally represent the ultimate product manufactured by Western.

Recently, to expedite product availability "controlled introductions" have been employed. This procedure provides the introductory company with a product manufactured by Western on regular production facilities. The product is also purchased by the telephone company at normalized Western prices. The participating company is provided with assurance that should any unforeseen trouble conditions develop they can be assured of the full support of Bell Laboratories, Western and AT&T in resolving the problems.

Most customer products are installed on customer premises by telephone company personnel and, therefore, despite all of the assistance rendered by Bell Laboratories, Western and AT&T should a trouble be encountered and the final solution require a change in components or replacement of instrumentalities under an "A" change classification, only materials are supplied by Western to the telephone company at no charge. The labor associated with a field visit to customers' premises to implement the change must be borne by the telephone company.

As you may know, there is an increasing reluctance on the part of the telephone companies to participate in field trials. This attitude stems from the following considerations:

1. The number of requests for trials is increasing and trial activities generally impose an additional burden on top of an already heavy work load.
2. Experience which indicates that the trial companies must bear the expense of visits to customer premises to correct the trouble condition despite all the assurances of assistance in resolving unexpected problems.

In connection with the controlled introduction of the 7A Communication System in Phoenix at least two significant Class A Changes have been made to the product which require visits to customer premises. One of these is covered by CPCN 132-XY and the other one by CEC-3013. In both cases the labor incurred by the telephone company to implement the recommended change will be significant insofar as the local people are concerned.

We believe that experience of this type points to the need for a reevaluation in the way new products are introduced and tried out in the field environ-

ment. Steps can be taken to require all new customer products to be adequately field trialed and funded under the BTL development case. Although this has and will continue to be done in some instances, the adoption of this procedure as "standard" for all new product introduction has several drawbacks; i.e., a substantial increase in development costs will be incurred, delays will be experienced in the introduction of new products and the product trialed will more than likely not represent the final product as manufactured by Western. On the other hand, in the light of recent experiences we can anticipate greater reluctance on the part of telephone companies to participate in "controlled introductions" when they are expected to incur costs associated with changes to correct design deficiencies.

I believe it is appropriate to review the financial considerations associated with "controlled introductions" so that no unforeseen financial burden is placed on participating companies which would discourage them from participating in activities of this sort and which could also deter needed changes from being introduced in products on customer premises. Arrangements similar to those covered in the January 1, 1969, Customer Planning Division memorandum titled "Agreement Between AT&T Company and Western Electric Company Regarding Model Shop Trial Expenses" as they relate to maintenance costs incurred by the trial company would seem appropriate. We would be glad to participate in such a review and to this end have assigned Doug Jensen (303-451-1854 or Cornet 374-2584) of my organization to this project.

Sincerely,

W. SCHIAVONI.

EXHIBIT 18.—*Letter to Mr. Schiavoni from Mr. Nette Re Keeping the Key Systems Competitive*

MICHIGAN BELL,
Southfield, Mich., November 14, 1973.

Mr. W. SCHIAVONI,
American Telephone and Telegraph Co.,
New York, N.Y.

DEAR MR. SCHIAVONI: In response to the questions you raised in GL 73-09-171, I would recommend that you consider the following:

[8 priorities indicated of features that must be made available on existing and future key systems at low cost in order to remain competitive.]

While the above list is rather long, it accurately represents my feelings as to what must be done in the key telephone field if we are to get competitive and remain so. If you have any questions, please call me.

Yours truly,

J. R. NETTE.

EXHIBIT 19.—*Letter to Mr. Ross from Mr. Schaefer Re New Look Packaged Key Systems*

BELL LABORATORIES,
November 19, 1973.

Re New Look Packaged Key Systems With Hands-Free Answer on Intercom and Built-In Speakerphone.

MR. IAN M. ROSS: AT&T Marketing, Engineering and we are in agreement that our next step in the packaged key series of offerings should be to provide hands-free answer on intercom (HFAI) and built-in speakerphone (BIS) features. There is evidence of a real market and several competitors have these features in their product lines at this time. The way to get these features in our product line seems to us to be through a new look set such as the STS styling. The issue at this time is a lack of a Western Electric commitment to provide such a set early next year. This letter will illustrate some of the factors involved and will recommend that you bring this issue up at the highest levels at Western and AT&T to achieve a resolution.

AT&T Marketing has estimated that sales of 7A packaged key systems in 1974 will be about 10,000 systems which is about 130,000 sets. Official Marketing estimates for the 14A system do not exist, but Marketing's "best guess" for

1974 is about 3000 systems which is about 75,000 sets. I believe that Western estimates of their 1974 program for the basic 7A and 14A sets are somewhat lower than the above numbers but there is little doubt that the packaged key offering is on its way to being a market success. As you know, the 7A was introduced in Phoenix and is now available as a systems standard. First shipments of the 14A occurred early in November for trial in Pennsylvania Bell.

We've asked AT&T Marketing to estimate the potential demand for BIS/HFAI sets for the 7A and 14A systems. Based on the traditional Speaker-phone demand of about 3% of business key lines, and the estimate of packaged key sales of about 200,000 sets in 1974, we estimate the potential demand for BIS/HFAI sets to be about 6000 with about 4000 of these being the 7A variety.

Attached to this note are brochures on a couple of competitors' offerings, the TIE II and the NEC Patrician, together with a recent filed representatives report indicating interest in the HFAI features on packaged systems. Note that the sets described in the competitors' brochures provide new styling, the usual key stem features, and HFAI. In addition, the TIE II can have BIS. We understand that NEC is planning to push very hard with the Patrician set in the American market and is putting a great deal of effort into new key systems for the export market. Thus, we are already behind in providing these features through WE equipment.

Provision of these new features require some changes in the packaged key system unit and in the set. The attached letter from Tom Powers to Alec Feiner and Don Leonard outlines the design changes involved. The key system unit design is complete and there appears to be no problem as far as manufacturing schedules are concerned. See attached letter from Alec Feiner to Tom Powers dated November 12, 1973.

The pacing item is the set. Don Leonard is planning to release LDIs for the 7A and 14A versions in January, 1974, along with a few other things. (See attached letter from Leonard to Fitzwilliam.) These sets will have some interim components, particularly use of the standard key instead of an LED key, in order to accelerate the schedule. At this time WE has given a production estimate on a new set for use with 1A2, which we haven't asked for yet, and for STS, but we have no commitment on new sets for packaged key systems. Don's present estimate of availability of new BIS/HFAI sets for packaged key, assuming the same WE enthusiasm as demonstrated for the STS, is mid-1974 for small quantities of both sets with earlier availability (perhaps March) of the 7A set since it shares STS plastic. Without a strong WE push, availability would not be until January, 1975 for 7A and October, 1975 for 14A. More details are in the attached letters from Don Leonard to Tom Powers and from R. K. Thompson to J. W. Fitzwilliam. At this time, the primary Western emphasis is on production of the STS set with initial models scheduled in December and a production capability of a few hundred sets per month available early next year. We feel that it would be possible to make initial models of the 7A set with HFAI and BIS available by diverting housing from the STS program since these housings are essentially identical. However, the 14A with HFAI and BIS requires a bigger housing for which Western has not yet decided to tool.

Based primarily on the pressure of the market, we make the following recommendations:

1. That initial models of a 7A set with HFAI and BIS be made available to the field as quickly as possible, probably by diverting housing from the STS program.
2. That Western immediately begin to tool up for the 14A set with HFAI and BIS in order to make models available to the field early in 1974.
3. That the STS program continue into field trial in order to determine the real extent of the market. A market research study of the less than 5 line key market is expected to be complete in March, 1974.

I understand that AT&T Marketing (Bill Rinkor) and the AT&T Engineering (Bill Schiavoni) will support these recommendations. Please let me know if we can furnish any more information for your use.

J. W. SCHAEFER.

EXHIBIT 20.—*Letter from Mr. Anderson to Mr. Schiavoni Re Key Telephone Losses of New England Telephone*

NEW ENGLAND TELEPHONE.

November 28, 1973.

Mr. W. SCHIAVONI,
Engineering Director, Customer Telephone Systems,
American Telephone & Telegraph Co.
New York, N.Y.

DEAR BILL: In the past three months competition has taken a total of 183 key telephone systems from the New England Company. Thirty-eight (38) of these systems might have been saved with COM KEY 718 and seven (7) other systems might have been retained if the COM KEY 1434 was available for us to offer.

The two reasons offered for the losses other than "no chance to compete" were "features" and "price" in that order. It might be well to offer some of the COM KEY features to the customers with five lines or less.

Your letter has been discussed with our Marketing Department and the features that we desire to offer and their priority are as follows:

[8 items indicated.]

[Paragraph describes suggestions for improving existing key telephone systems.]

In the future design of key telephone systems, apparatus which reduces the required number of cable pairs should be considered. Apparatus cabinets should be cut down in size, appearance modernized, and above all a real effort made in making the various features less costly.

C. W. ANDERSON,

Assistant Vice President, Engineering.

EXHIBIT 21.—*Com-Key 718 Rate Comparisons*

COM KEY 718 RATE COMPARISONS (15 STATIONS—7 TRUNKS—TOUCH-TONE)—BELL OPERATING COMPANY, PACIFIC TELEPHONE & TELEGRAPH RATES

Quantity, USOC, and item	Monthly rental of item	Total item monthly rental	Item 1 time installation charge	Total item 1-time installation charge
1—KGL—Common equipment rotary dial.....	\$38.75	\$38.75	\$130	\$130
7—KGG—Line equipment.....	1.70	11.90	4	28
1—KGV—Ringing trunks night transfer.....	1.20	1.20	6	6
1—KH5—Music on hold.....	2.10	2.10	9	9
1—FTP—MOH Connector arrangement.....	1.60	1.60	11	11
1—KH6—Station busy console with DSS.....	5.25	5.25	50	50
15—KGJ—Rotary dial stations.....	5.00	75.00	40	600
15—KGN—Automatic privacy arrangement.....	.85	12.75	11	165
15—KGS—Privacy release key.....	.80	12.00	9	135
Totals.....		160.55		1.134

COM KEY 718 RATE COMPARISONS (15 STATIONS—7 TRUNKS)—BELL OPERATING COMPANY, OHIO TELEPHONE RATES

1—KGL—Common equipment rotary dial.....	\$40.00	\$40.00	\$150	\$150
7—KGG—Line equipment.....	1.50	10.50	15	105
1—KGV—Ringing trunks night transfer.....	1.00	1.00		
1—KH5—Music on hold.....	3.00	3.00		
1—FTP—MOH connector arrangement.....				
1—KH6—Station busy console with DSS.....	10.00	10.00	40	40
15—KGJ—Rotary dial stations.....	6.50	97.50	600	600
15—KGN—Automatic privacy arrangement.....	1.00	15.00		
15—KGS—Privacy release key.....	1.00	15.00		
Total.....		192.00		895

COM KEY 718 RATE COMPARISONS (15 STATIONS—7 TRUNKS—TOUCH-TONE)—BELL OPERATING
COMPANY, ILLINOIS

Quantity, USOC, and item	Monthly rental of item	Total item monthly rental	Item 1 time installation charge	Total item 1-time installation charge
1—KGL—Common equipment rotary dial.....	\$40.00	\$40.00	\$150	\$150
7—KGG—Line equipment.....	1.50	10.50	15	105
1—KGV—Ringing trunks night transfer.....	1.00	1.00	-----	-----
1—KH5—Music on hold.....	4.50	4.50	45	45
1—FTP—MOH connector.....	-----	-----	-----	-----
1—KH6—Station busy console with DSS.....	8.00	8.00	50	50
15—KGJ—Rotary dial stations.....	7.50	112.50	50	1,175
15—KGN—Privacy.....	1.00	15.00	-----	-----
15—KGS—Privacy release.....	.75	11.25	-----	-----
Total.....	-----	202.75	-----	1,525

COM KEY 718 RATE COMPARISONS (15 STATIONS—7 TRUNKS)—BELL OPERATING COMPANY, NEW JERSEY

1—KGL—Common equipment.....	\$45.00	\$45.00	\$100	\$100
7—LGG—Line equipment.....	1.85	12.95	-----	-----
1—KGV—Night transfer.....	.90	.90	-----	-----
1—KH5—Music on hold.....	3.00	3.00	-----	-----
1—FTP—MOH connector arrangement.....	-----	-----	-----	-----
1—KH6—Buy console with DSS.....	10.00	10.00	40	40
15—KGJ—Rotary dial stations.....	8.00	120.00	30	450
15—KGN—Privacy automatic arrangement.....	1.10	16.50	-----	-----
15—KGS—Privacy release key.....	.90	13.50	-----	-----
Total.....	-----	221.85	-----	590

COM KEY 718 RATE COMPARISON (10 STATIONS AND 5 TRUNKS CONFIGURATIONS)

Quantity, USOC, and item	Pacific Telephone & Telegraph rates, California				Ohio Telephone rates for Ohio			
	Monthly rental		Item 1-time		Monthly rental		Item 1-time	
	of item	monthly rental	installation charge	Total item 1-time installation charge	of item	monthly rental	installation charge	Total item 1-time installation charge
1-KGE—Common equipment rotary dial	\$31.50	\$31.50	\$110	\$110	\$30.00	\$30.00	\$150	\$150
5-KGG—Line equipment	1.70	8.50	4	20	1.50	7.50	15	75
1-KGV—Ring transfer night transfer	1.20	1.20	6	6	1.00	1.00		
1-KH5—Music on hold	2.10	2.10	9	9	3.00	3.00		
1-FTP—MOH connecting arrangement	1.60	1.60	11	11				
1-KH6—Station busy console with direct station selection	5.25	5.25	50	50	10.00	10.00	40	40
10-KGH—Rotary dial station	4.80	48.00	40	400	6.00	60.00	40	40
10-KGN—Automatic privacy arrangement	.85	8.50	11	110	1.00	10.00		
10-KGS—Privacy release key	.80	8.00	9	90	1.00	10.00		
System total		114.65		806		131.50		665

EXHIBIT 22.—*"An Introduction to the Com-Key 718," Published by Ohio Bell Telephone Co., September 1973 (excerpts)*

* * * * *

EXECUTIVE SUMMARY

The COM KEY 718 was developed to meet the customer pressures in the new competitive market place. The system is a large packaged key telephone system designed with two major objectives in mind:

(1) To incorporate a number of new features that customers want and that improve the utility of their telephone system.

(2) To permit attractive rates by utilizing every economy possible.

COM KEY 718 has a capacity to terminate up to seven (7) Central Office lines and eighteen (18) stations. It has been designed to be offered as a basic package with optional features which may be individually selected.

Standard features include: Pick Up, Hold and Illumination with Wink Hold, Two-Path Dial Intercom, Voice and Tone Signaling, Multi-Line Conference (Central Office Lines), Button Restoration.

Optional features include: Privacy, Music on Hold, Paging, Station Restriction, Power Failure Transfer, Night Transfer, Background Music, Preset Conference (Intercom), Busy Lamp Console, Direct Station Selection, Busy Lamp Console, Message Waiting, Touch-Tone.

For planning purposes only, the A.T.&T. suggested rate and tariff strategy has been included with this introduction. Several fundamental differences exist between the suggested strategies for COM KEY 718 and current Key Telephone service offerings.

A controlled market introduction of the COM KEY 718 was conducted in the Phoenix Metropolitan Exchange Area and Pennsylvania Bell. With this introduction coming to a close this month, *preliminary results appear to confirm the ability of COM KEY 718 to meet the requirements of the competitive market place.*

A market demand forecast for the COM KEY 718 system in Ohio has been prepared for use by A.T.&T. and our Rate Department. The forecast is based upon:

illustrative rate strategy proposed by A.T.&T.

in-depth analysis of three-hundred (300) randomly selected customers from the 3-7 line Non-PBX market segment

a review of the 1,611 small PBX systems with less than twenty (20) working stations

a specially prepared customer profile of all those customers who have either received a proposal or installed a privately supplied KTS.

In addition to a determination of the market potential for the COM KEY 718 over the next few years, a review of the competitive losses for 1972 is also included in this report.

During 1972, over \$66,000 in annual KTS revenues were reported lost to competitive equipment suppliers. Revenue losses have increased to close to \$116,000, through the end of August, 1973. Clearly, the COM KEY 718 will be entering a very active market place.

GENERAL INTRODUCTION

A.T.&T. conducted interviews early in 1972 with sales contact people in ten Operating Companies to identify the needs of the competitively vulnerable small business customer. Ohio Bell was selected as one of the ten Companies to talk with about this market. Salesmen, chosen from both Areas, met with the A.T.&T. Key Telephone Coordinator on *February 8, 1972*. The people who attended this meeting, and those conducted in the other Operating Companies, told A.T.&T. why customers were going to competitive equipment suppliers and what was needed in the way of features and pricing policies to meet competition.

As a direct result of these meetings, a recommendation for two new key telephone systems was presented and approved by the Customer Products Council in September, 1972. Since that time these systems have been officially named the COM KEY 718 and the COM KEY 1434. The systems are designed to be offered as a basic package with optional features which may be individually selected. They differ only in their capacities. The smaller system, the COM KEY 718,

has a capacity for seven (7) central office lines, two (2) dial intercom paths and eighteen (18) stations, utilizing a modified ten-button set. The larger system, the COM KEY 1434, utilizes a modified twenty-button set, with a capacity for fourteen (14) central office lines, three (3) dial intercom paths and thirty-four (34) stations.

The COM KEY 718 is currently being introduced on a controlled basis in the Phoenix Metropolitan Area (Mountain States Telephone Company). The Phoenix Metropolitan Area has served as the trial area for this system since June, 1973. Pennsylvania Bell has also introduced the COM KEY 718 on a trial basis. Their original trial site, Wilkes Barre, was expanded to include the entire state of Pennsylvania because initial sales results were poor.

The COM KEY 1434 is scheduled for introductory trial in Pennsylvania during November, 1972.

Although these trials have not been completed, the COM KEY 718 still appears to meet the requirements of the market it was designed for. An adequate supply of the COM KEY is currently being produced to allow an introduction of this system in Ohio during the final quarter, 1973. The COM KEY 1434, on the other hand, will not be available for general introduction until after January, 1973, according to A.T.&T.

*	*	*	*	*	*	*
<i>Com Key 718, demand forecast</i>						
Year:						<i>Number of systems ¹</i>
1973 (4th quarter)	-----					115
1974	-----					655
1975	-----					905
1976	-----					945
1977	-----					685
1978	-----					510

¹ Based on rates proposed in R. L. Hess' Apr. 11, 1973 letter.

COMPETITIVE ACTIVITY

The COM KEY 718 was designed to meet customer pressure for the features available at a reasonable price from competitive equipment suppliers. To determine the market for this system in Ohio, we extracted a customer profile of the competitively vulnerable customer from our Competitive Activity Report data base. All customers—non-PBX and PBX alike—who had received a competitive proposal or had installed a privately-supplied system were identified. Pending, won and lost cases were included in our selection. From this group we were able to make several interesting observations about competition in the small business account market.

A. *Present system.*—Our salesmen reported competitive activity on two-hundred and five (205) accounts where the outside supplier proposed a Key System: sixty-six percent (66%) or 135 had Ohio Bell Key Telephone Systems; slightly less than twenty-one percent (21%) were PBX accounts; and fourteen (14) cases listed "no present service."

B. *Size of System.*—Sixty-three percent (63%) of the systems consisted of 6-20 stations. Average monthly cost for Ohio Bell equipment only on each of the contested telephone systems was \$129.93.

C. *Competitive System Proposed.*—I.T.&T. Key Telephone System and the Nitzuko Key Telephone System dominated the market—I.T.&T. MTS—35% or 71 cases—Nitzuko—33%—COM KEY 718 was designed to compete with the Nitzuko system. It also compares favorably with the I.T.&T. KTS.

D. *Reason for Interest in Competition.*—Price remained the most significant reason for interest in privately-supplied equipment.

E. *Payment Plan.*—Purchase only—22%—Lease with purchase option—17%—Lease or outright purchase—12%—unknown—41%—The average purchase price was \$4,319. The majority of the leasing programs extended from 5 to 10 years at an average cost of \$868 per year (63% of the leasing arrangements were reported as unknown).

COMPETITIVE REVENUE LOSSES

The losses reported in the KTS market during 1973 vividly illustrate the need for a product with the design characteristics of the COM KEY 718. Competitive

losses as reported in the Competitive Activity Report (prepared by Commercial-Marketing Department) show a significant increase in the revenues lost to competitive equipment suppliers:

	Annual revenue loss
1973 KTS losses (Jan.-Sept. 1, 1973)-----	\$115,752
1972 KTS losses-----	66,000
Additional losses 1973-----	49,752

These figures represent only those customers who presently have, or had, KTS equipment. *The annual "KTS losses" figures do not include small PBX systems that have been replaced by privately supplied Key Systems.*

Our salesmen have reported one-hundred and twenty-eight (128) KTS accounts that have chosen competitive equipment. Our loss ratio of fifty-four percent (54%), with an additional sixty three (63) pending cases, is alarming. An these results reflect competitive activity for the first eight months of 1973!

* * * * *

OHIO BELL,
Cleveland, Ohio, July 27, 1973.

Mr. J. A. Hermann, District Marketing Manager—Cleveland.

Mr. E. D. Clouse, District Marketing Manager—Columbus.

To prepare for the introduction of the new Com Key 718 during the final quarter of 1973, we recently completed a demand forecast for this new system. Your sales groups may be interested in the customer profile of the competitively active small business customer we used in the development of our forecast.

The customer profile was extracted from the Competitive Activity Report data base for 1972 and 1973 (including January-March). All customers—PBX and non-PBX alike—who had received a competitive proposal or had installed a privately-supplied system were identified Pending, won and lost cases were included in our selection. Through analysis of this special group of customers, we were able to make several interesting observations about competition in the small business account market.

A. Present System

During the period analyzed, our salesmen reported competitive activity on two-hundred and five (205) accounts where the outside supplier proposed a key system. Of these accounts:

Sixty-six percent (66%) or 135 had Ohio Bell Key Telephone Systems; slightly less than twenty-one percent (21%) were PBX accounts; and fourteen cases listed "no present service".

Although the majority of the competitively involved customers were KTS accounts, a significant number of PBX accounts were contested. Of those PBX accounts (21%) that experienced competitive pressures:

Two percent (2%) were 507 PBX;
six percent (6%) were 555 PBX;
four percent (4%) were 755 PBX; and
eight percent (8%) were 756 PBX accounts.

An additional three (3%) were 20-40 Dial Pak Systems.

B. Size of Proposed System

The Com Key 718 appears to have been correctly designed for the most competitive market because 63% of the systems in the group—PBX and KTS—consisted of 6-20 stations. The average monthly cost for Ohio Bell equipment only on each of the contested telephone systems was \$129.93.

C. Competitive System Proposed

The IT&T Key Telephone System and the Nitzuko Key Telephone System clearly dominated the competitive market place. The IT&T KTS was proposed on 71 cases, or 35% of the total group studied. The Nitzuko KTS is marketed as the Arcata Custom Key 1030, the Tie system or the Nitzuko System. It accounted for 33% of all the KTS proposals that competitors made. *The Com Key 718 was designed to compete directly with the Nitzuko System because it has been the strongest competitor in the Bell System.* Featurewise, the Com Key also compares favorably with the IT&T Key System.

D. Reason for Interest in Competition

Price remains the most significant reason for interest in privately-supplied equipment. Unfortunately, *close to twenty percent (20) of the cases did not report any reason for customer interest in competition.*

E. Payment Plan

Several payment options were made available to the customers in the group including:

Purchase only—22%.

Lease *with* purchase option—17%.

Lease *or* outright purchase—12%.

Unknown—41%.

The average purchase price was \$4,319. The majority of the leasing programs extended from 5 to 10 years at an average cost of \$868 per year (63% of the leasing arrangements were reported as unknown).

If you desire any additional information concerning this analysis of competitive key system activity or the Com Key 718, please contact Jim Bradley of my staff at 822-2050.

C. R. GRACE,
District Operations Manager-Marketing.

* * * * *

PABX MARKET SPECULATION BY I/C COMMUNICATIONS

I/C Communications in conjunction with Specialized Communications Services, Inc., a consulting firm located in Eastchester, N.Y., presents these estimates, from 1975 to 1980.

Assumptions:

1. A total PABX universe of 250,000 systems by 1980.
2. The average cost of a 100-line system placed at \$80,000.
3. Interconnection accounting for 16% of the universe, or 39,000 customer-owned units.
4. PABXs of 500-and-over lines and key systems registering the biggest gains during a two-year period.
5. A market plateau by 1975, with growth rates decreasing.
6. A fairly static share of the market for interconnected systems by 1980.
7. The cumulative value of the PABX segment of the interconnect industry approximating \$3 billion by 1980.

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Approximate percent of universe.....	0.8	1.8	3	4	6	7.5	9.5	11.5	13	16
Percent growth.....		110	70	50	40	30	25	20	15	15
Additional systems.....		2,240	2,960	3,600	4,300	4,500	4,800	4,800	4,500	5,300
Number of systems installed....	2,055	4,295	7,255	10,500	15,100	19,600	24,400	29,200	33,700	39,000
Cumulative value (millions)....	\$100	\$200	\$400	\$600	\$1,000	\$1,300	\$1,900	\$2,300	\$2,600	\$3,000
Value per system (thousands)...	\$50	\$50	\$60	\$65	\$65	\$65	\$70	\$75	\$80	\$80
Number of lines per system.....	65	68	78	85	90	90	90	95	95	100
New business dollars (millions).....		\$100	\$200	\$200	\$400	\$300	\$600	\$400	\$300	\$400

EXHIBIT 23.—Chapter 6 of Final Report of President's Task Force on Communications Policy, December 7, 1968

CHAPTER 6. THE DOMESTIC TELECOMMUNICATIONS CARRIER INDUSTRY

I. INTRODUCTION AND SUMMARY

This chapter treats the core of the telecommunications industry—the traditional services of the domestic common carriers, such as the Bell System, General Telephone and Electronics, Western Union and the some 2,000 independent telephone companies, and related private communications services. Among these are telephony and telegraphy, the newer offering such as computer data transmission, and television and radio program transmission from studios or other points of origination to local broadcasting stations.

The President directed the Task Force "to make a comprehensive study of communications policy." He spoke of the need to review past activities in the field of communications, and to formulate a "national communications policy."

More specifically, the Task Force was asked to determine if the Communications Act of 1934 and the Communications Satellite Act of 1962 require revision." In studying the future for satellite communications, both domestic and international, we were directed to study ways in which the new technology should be integrated into a balanced and dynamic communications system. As the President observed, the new technology—exciting as it is—does not mean that all our surface communications facilities have become obsolete.

We have found an examination of the domestic industry to be indispensable, both for itself and because of its interaction with other elements of our mandate. And in our study we found juxtaposed two basic facts: On one hand, an impressive record of past achievement in terms of innovation and market growth within the industry; and on the other, an industry in a state of creative ferment facing a host of new challenges and new opportunities.

A. Given the Nature of Public Message Telephone Service, Integrated Control Remains Vital

On the basis of existing technology, we conclude that the basic structural element of domestic telecommunications services—the integrated provision of public message telephone services—is satisfactory; and the case for private monopoly regulated by public authority is convincing. The switched network should remain a high quality system interconnecting all terminals reliably and economically.

This conclusion is based on the fact that public message telephone service, employing the switched network, has characteristics that sharply distinguish it from other services. The ordinary user of public message telephone service, as distinguished from the user of private line services, requires access on demand from his telephone to any one of millions of points. Integrated operational control—obtained through the combined efforts of the Bell System and the franchised independent telephone companies—is essential in providing this universal access.¹

This conclusion is also based on the weighty consideration of system optimization, system integrity, and service reliability. And it is based too on considerations of national security; for crisis management requires a completely reliable capability for communication, both within the nation and with our forces and allies overseas. System optimization involves the coordinated planning requirements of a vast, interdependent network of communications facilities. Since each element affects many others, development of single segments without regard to their effects upon the total system could well lead to wasteful redundancy. System integrity involves the need for control over quality of the inputs to the network. Users or operators of one part of a communications grid can, by supplying it with improper or distorted signals, interfere with other users throughout the system. Finally, high service reliability, which the American public has rightly come to expect, could be jeopardized by developments which weakened the technical integrity of viability of the public message telephone network. Thus, it is important to have coordination for the technical standards in the network, its interconnections, and its inputs.

That integrated control is a sound organizing principle is well-supported by the impressive rate of past technological advance and market growth: The number of telephones in the United States has quadrupled since the end of World War II. In only 15 years, direct distance dialing has been extended to more than 90% of all telephones in the United States. In the past two decades, improved transmission systems have been introduced at the rate of one every two years. Although the overall cost of living has risen by 140% since 1940, total telephone rates (local and interstate) have increased only 10%, while interstate rates taken alone have actually fallen by 20%. In short, it can truly be said that the United States has the finest telephone system in the world.

Fully mindful of this record of achievement, we inquire here into the basic elements of a well-conceived and comprehensive national policy that would contribute to continued rapid advance. For we see a host of potentialities emerging for yet more cost-reducing innovation, for new services, and for market growth in many directions. Policy must be designed to exploit as fully

¹ The extent to which such integrated control requires actual ownership or management of a particular element in the system is, of course, related to technological developments and the evolution of regulatory policy. One example is in the area of domestic satellites, where we recommend a pilot project in which Comsat would provide long-haul circuits to terrestrial carriers.

as possible those potentialities, while maintaining the integrity and viability of the public message telephone network which constitutes the core of our national telecommunications system. Only such a policy applied as feasible at every stage, from research to the delivery of private and common carrier nations are making rapid progress. For many reasons, we cannot and should not tolerate the waste of missed opportunities.

Second, we take it as self-evident that telecommunications policy should seek to maintain and develop an environment always sensitive to consumer needs. It should be an environment hospitable to productive innovation in facilities, services and management. Advancing technology promises a host of new opportunities. Among them are: the realization of the full potential of satellite communication and teleprocessing; the production of terminal equipment offering small business users of far wider range of telecommunications services; and the expansion of the range and diversity of television. The challenge is to transform the fruits of technological knowledge into tangible benefits for the public, through cost-reducing innovation and well-conceived public policy.

Third, the realm of telecommunications should be viewed as a system, extending from public and private research, at one end of the spectrum, to the provision of private and common carrier communications services, at home and abroad, at the other. Our study has taught us the necessity to keep the whole of this system, and its interconnections, steadily in view. We have found that none of its problems can be examined in isolation, and therefore that piecemeal or segmented treatment of any one of them can be misleading.

Fourth, we have assumed that special consideration should be given to the needs of the developing nations. Modern telecommunications systems can be a valuable—indeed, nearly indispensable—catalyst of their economic, social and political progress.

III

The role of government is of unusual importance in telecommunications. How well government meets its responsibilities is and will continue to be a major factor in the development of the communications system as a whole.

One cannot carry on the telephone, telegraph or broadcasting business, either domestically or internationally, without government approval and regulations. And, where monopoly is required, it should be protected from competition to the extent that the public benefits from its natural monopoly characteristics. In that case, the public is protected by regulatory constraints.

These, then, are the twin principles which underlie the recommendations of this chapter: Maintaining the integrity and viability of the basic network as an integrated system on one hand; on the other, releasing and encouraging potentialities for improvement which might otherwise be restrained by tradition, business habits, or regulatory practices no longer appropriate in the face of new challenges and new opportunities.

II. NEW OPPORTUNITIES ARE EMERGING FOR SERVICES SUPPLEMENTING THOSE OF THE PUBLIC MESSAGE TELEPHONE NETWORK

At the outset, we find it useful to distinguish between the public message telephone service, and leased line or private line service. The former uses a portion of the integrated nationwide network with circuit switches to connect on demand any subscriber's telephone to any one of the 100 million telephone stations throughout the country—or to any one of the other 100 million throughout the rest of the world. The prime characteristic of this market is universality of access to a multitude of occasional users. In contrast, a telephone or telegraph private line is a circuit connecting two or more points to meet the needs of specific users for full-time access to fixed points. While private line service shares much equipment with the message service—the same cables, microwave towers, repeater terminals, carrier terminals and the like—it does not ordinarily employ the elaborate circuit switching facilities of the telephone message services.

Another category, public message telegraph services, requires switching, but of a distinctive kind. Only a few thousand Western Union offices need be connected, rather than millions of telephone subscribers; and individual telegraph messages, unlike telephone calls, can be bunched or stored and forwarded after a delay. For these reasons Western Union employs a separate and specially tailored message switching plant, in addition to using channels in the telephone switched network.

In recent years, demand by government and business enterprises has been growing rapidly for private line services providing both voice and record links. Such services can be provided with circuits in paired wire and coaxial cable, terrestrial microwave relay and, prospectively, in satellites. In some cases, these circuits are provided by the common carriers. In others, users employ their own private line systems.

The evolution of these supplementary services offers new opportunities for progress in improving communications services. At the same time, it raises pressing policy questions with regard both to the integrity and the viability of the basic integrated network.

A. Subject to Radio Spectrum Limitations, Liberalized Entry into Inter-City Private Line For-Hire Service Appears Justified

While we conclude that salutary competitive pressures would be introduced by more liberalized entry into private line service, it is for the FCC to determine the merits of specific applications for entry. It is for the FCC to consider the impact of entry in specific cases on the viability of the integrated system. Moreover, a multitude of complex issues confront regulatory bodies in individual proceedings—issues which are explored in depth on the basis of a record carefully made. Our general comments below should not be taken to imply any view of the merits in specific cases. That, by law, is for the regulatory body.

With the exception of those specialized carriers providing connections to television broadcast and cable systems, the FCC currently permits private line systems outside the existing common carrier network only if they are on a *not-for-hire* basis. In consequence of this policy, the restrictions on interconnection with common carrier networks, and Bell's low Telpak rates for some users, private systems provide only a small portion of the nation's telecommunications services. While over 400 organizations currently employ private microwave, their total of approximately 2.5 million circuit miles is less than 2% of Bell's total of about 150 million circuit miles.

Private line services, accounting for 15% of Bell's long-haul revenues and 40% of its long-haul circuits, are growing at a faster rate than Bell's other offerings. For Western Union, more than 30% of its revenues represent private line service, some of it in customized computer offerings described in a subsequent section; its private line revenues have increased rapidly in recent years, due chiefly to government use.

We see several advantages to making available more potential business opportunities in these markets. New kinds of services offering a wide range of quality, capacity and price levels might be developed and tested in response to varying needs of particular user groups, thereby enhancing the likelihood of greater consumer satisfaction in these areas. And technological advances, such as microwave equipment produced in competitive equipment markets, might be more rapid if introduced by numerous private line suppliers. Finally, additional competitive pressure, even if confined to supplementary services, could be an important factor in gauging and maintaining high performance in this industry.

In principle, we see no reason for not seeking a similar outcome for satellite and other new long-haul transmission systems when they become operational. Given our lack of operational experience with domestic satellite applications, however, it is too soon to state unequivocally the appropriate disposition. Even so, the burden should continue to be on the carriers to demonstrate why entry privileges should be withheld, rather than vice versa. As we note in our domestic satellite chapter, a number of attractive prospects exist for specialized satellite services (e.g., wide band, wide-area data exchange networks, TV network distribution and occasional use networking). These might be offered on a competitive basis, in addition to the potential role of satellites in the basic long lines common carrier network.

Application of entry policies to the circumstances of the independent telephone companies may involve different considerations. They have argued that lacking the scale economies of the Bell System long-haul network, they could not respond effectively to competition in private lines without injury to their overall level of services. However, these companies own only a small portion of the total nationwide private line circuits, and the bulk of what they do own involves wholly intrastate lines. Consequently, evaluation of the merits of their position and policy decisions regarding franchises to private line applicants seeking to

compete with their private lines is ordinarily and properly for the state regulatory bodies, and beyond the scope of this Report.

1. *The issue of service reliability and quality can be resolved in the market place.*—Of course, the potential benefits from competitive pressures must be weighed together with the effects on the telecommunication system in terms of service reliability and quality, system optimization and an equitable price structure. As a case in point, some have expressed concern that new service competition might offer large users lower costs, but at the price of reduced quality. More generally, they argue that if freer entry were allowed, poorly financed and managed firms may offer service far below what is currently regarded as desirable in terms of quality and reliability. They question whether it is in the public interest to expose potential users to such risks, especially in view of the good service being rendered in this field by existing common carriers.

Subject to qualifications discussed subsequently, we conclude that such questions should be left to the market place. Let the buyer choose among the combinations of price, quality and reliability most appealing to him as a private line user. If the service turns out to be poorer than he expected, he is free to move to an alternative service. Or if the price falls to reflect the poorer performance, perhaps he will choose to remain. This is the essence of the competitive process. One of the great potential benefits of freer entry is to search out and develop new services tailored to particular needs.

Here it is again important to distinguish between the private line customer and the public message telephone user. In the former case, the user is a large business unit competent to choose either to purchase or not to purchase a service between specified points from among the offerings of competing entities. Moreover, so far as quality of private line service is concerned, the choice to go outside the established carriers affects, for the most part, only the customer making the choice. With the public telephone subscribers, the situation is very different. They are less likely than business users of private lines to require the differentiated service that a competitor of the integrated network might provide. And if suppliers did opt to sacrifice quality for a lower price, they might affect not only their own customers but all other customers of the public network who rely on it for dependable and high quality service to every telephone terminal.

2. *Proliferation of private communications systems could raise serious problems for the integrated network. But these problems can be met by allowing the established carriers sufficient flexibility in rates to meet competition, and by strengthening regulatory capabilities to prevent destructive competition.*—If competition is to yield improved efficiency in communications supply, pricing policies must be related to the markets involved. This is likely to require a change in traditional practices of pricing communications services. Today, common carrier tariffs are applied uniformly to jurisdictional areas and based on system-wide costs rather than the specific costs of serving specific routes. If such a pricing policy were to be maintained, new entrants would be provided with artificial and uneconomic incentives to enter the low-cost high-density routes. By diverting business on these routes from the established carriers—frequently called “cream skimming”—the new entrants could deprive the carriers of revenues which partially help to support service on high cost routes. Such patterns could encourage inefficient investment in communications and impose additional costs on society.

Therefore, when a competitive challenge to the established carriers arises, neither they nor the regulatory agencies should continue to apply the principle of jurisdictional tariff uniformity based upon the aggregate costs of serving all routes. Rather, prices over competitive routes should be based upon the costs and demand characteristics of these routes.

The sound response of policy, we believe, is to provide flexible opportunities for entry, matched by a policy of allowing the established carriers sufficient pricing flexibility to respond economically to the challenge of the new services. However, in placing the new entrant and the established carrier on equal terms, the new entrant should be protected against the threat of non-compensatory or “predatory” pricing on the part of a carrier who has a monopoly market. The danger of non-compensatory pricing is real. Under a system of regulation dominated by criteria of fair return on the entire rate base of the carrier, the possibility always exists that the carrier would use its superior position in sheltered markets to cover losses in the competitive sector. What is needed is a minimum price standard calculated with reference to the “long-run incre-

mental costs" for the particular service (including the cost of capital and the profits allowed for the incremental capital associated with the service), rather than for the system as a whole. With such a pricing standard, users of non-competitive services would not subsidize the users with competitive alternatives. The competitive services of the existing carriers would still pay the added costs they impose on the system.

The difficulty of determining an appropriate minimum price standard was illustrated by the Telpak rate case. Prior to the "Above \$90" decision, which liberalized entry by private microwave systems, Bell's interstate private line tariff applied uniformly to all consumers. In order to meet the competition of private user systems, Bell introduced discounts ranging up to 85%. Western Union and the suppliers of private microwave equipment complained to the FCC, which was unable to reach a decision in the initial Telpak hearing on the question of whether Telpak rates were compensatory. However, Bell's cost studies undertaken for the current FCC investigation into rate-making principles indicate that substantial rate increases were necessary in order to make Telpak compensatory.

The problem of defining the limit for the carrier's price flexibility in meeting competition is now one of the subjects of an inquiry before the FCC. If non-compensatory pricing is to be guarded against, the FCC must establish effective regulatory standards over minimum rates. Otherwise, pricing responses of the established carriers could uneconomically foreclose entry of efficient entrants. Given the importance of this issue and its complexity, the FCC should take a more active role on pricing issues than it has taken in the past, including review of subsequent carrier rate increases following competitive responses by carriers.

However, it is also important to recognize that the regulatory power over minimum rates could be exercised in ways which unduly restrict fair competition. Minimum pricing standards must not be employed as "umbrellas" to protect established firms from each other and from potential new competitors. Rather, they must encourage the substance of competition by permitting liberal exit conditions to complement the liberal entry conditions.

We do not minimize the danger that regulated competition could lead to policies of accommodation rather than of real rivalry. The best protection against this risk is a general understanding of the policies involved, and of the principles which should govern in the resolution of disputes. In such an environment, it should be clear to firms considering entry into the field that they would enter at their risk, with no protection against the established carriers should the latter react by reducing their rates towards a prescribed floor.

3. *Under new competitive pressures, an equitable pricing structure can be maintained.*—Some would object to the proposal for geographical rate flexibility on grounds that the rate structure would thereby be badly fragmented. We recognize that the introduction of rate flexibility would very likely for a lowering of rates in some markets and, conceivably, an increase in others. Some would question whether such adjustments would be widely acceptable and in the public interest.

With respect to private line services we do not consider this a serious problem. Businessmen are accustomed to incurring different costs—labor, transportation, materials, taxes, etc.—depending on location. Despite uniform tariffs, differential effective rates have been a familiar feature of the private line business for many years. Businessmen and the communities where they operate should be able to adjust to locational discounts as well.

Problems of differential pricing based on cost differences would be more serious in the public message service. There we have a long tradition of charging equal rates for standard units of service regardless of location; and strong objections might be raised if the pricing of ordinary telephone service were to vary according to the underlying cost characteristics of specific markets.

B. Suppliers of Private Line Services, Both For-Hire and User-Owned, Should Be Permitted to Interconnect With Each Other and With Common Carrier Private Line Networks, Subject to Appropriate Standards Regarding Compatibility and Protection

Restrictions on interconnection with common carrier private line systems have been a serious handicap to the growth of private systems; for such restrictions mean that any user system must be self-contained with its own local loops, terminal gear and other equipment. We conclude that such interconnection could be a stimulus to competition, diversity, and development; that it

need not pose a serious threat to system integrity; and that it could be made consistent with the needs of national security.

1. *Interconnection with common carrier private lines is vital in promoting competition without wasteful duplication of facilities.*—Conceivably, an efficient new supplier of transmission facilities could bring lines into individual offices in parallel with those of existing carriers, and still price the service attractively enough to maintain a profitable business. But this outcome, involving obvious and wasteful duplication of facilities, could hardly be judged desirable. While such duplication might be more than offset by efficiencies in operations elsewhere, the most economic solution would be to maintain the efficiencies while avoiding the added cost of the duplication. Thus, policy should be aimed at requiring interconnection with the carrier's private lines, in order that new entrants be able to gain access to their own customers.

2. *System integrity need not be jeopardized by such a policy.*—In the past, the carriers have opposed compulsory interconnection on the ground that their network would be adversely affected by the inputs into it made by a foreign attachment, whether that attachment is a piece of user terminal gear or an entire system. Whatever the relevance of this concern to the switched network, it is not as critical to connection of private lines; in fact, the carriers already permit private line users to attach their own terminal gear and protective devices and a recent Bell tariff offering would permit not-for-hire private systems to interconnect even into the switched network provided it is done through Bell-supplied protective and network control devices and meets certain criteria.

Another fundamental aspect of system integrity involves management responsibility. The carriers have contended that unless they have full and uncompromised responsibility for service among users, they cannot guarantee high levels of reliability and quality. If ownership of a particular service is fragmented in the hands of several entities interconnected with each other, it is difficult or impossible, some assert, to establish fault and responsibility when problems arise.

Again, the distinction between private line and the switched network is salient. In the former, business users of full-time services are generally knowledgeable buyers. Since the user would be dealing with at most only a few entities serving only the few points to which he is connected by private line, and since we envisage these few entities would have interconnection agreements supervised by the FCC, the problem of divided responsibility should not be of decisive importance.

3. *Freer entry should be made consistent with the needs of national security for an integrated nationwide system.*—The growth of long-haul transmission facilities outside the integrated network poses a question of national security. If these lines are not compatible with the Bell System, they would not be part of the pool of circuits available for alternate routing by the carrier system, and they might not be as useful if a crisis required a change in normal routing patterns.

We agree that the further growth of private systems should be governed by rules taking full account of national security interests. However, the freedom of established carriers to meet the specialized carriers' challenge through flexible price competition, makes it most unlikely that significant portions of our evolving domestic transmission facilities could not be coordinated with the integrated system. If independent line systems are required to interconnect with the private line networks of the established carriers, and maintenance of the integrity of the system is a prerequisite for interconnection; such lines could be used within the nationwide network in time of emergency. We leave it to the FCC with the advice of the Executive Branch, in passing on specific applications, to decide whether additional design or technical constraints on interconnection or requirements for compatibility should be imposed in the interests of national security. If the Commission finds that additional constraints are needed, it should also determine by whom the cost of adaptation should be borne.

C. Self Contained, User-Owned Private Systems and Terminal Equipment Should be Permitted to Interconnect into the Message Telephone Network, Subject to Protection of System Integrity by Development and Publication of System Standards and, Where Necessary, Provision of Protection Equipment

Until now, customer-supplied terminal equipment has been allowed on private lines, but it has not been allowed on the switched network unless a protective

interface device (including a modulation/demodulation unit) is provided by the carrier. One justification for this distinction has been the need to maintain the integrity of the system. Signals generated by customer supplied terminal equipment on private lines generally do not employ the complex switching apparatus of local exchanges. Use of such customer-provided terminal equipment was therefore thought to involve less danger of interference with the integrity of the system than use of such equipment on the switched network. For similar reasons, the telephone companies previously prohibited all interconnections of private systems into the switched network. However, the FCC has recently declared illegal the telephone company tariffs containing general prohibitions against use of customer-owned modulation/demodulation devices and interconnection of private systems for interstate communications.² The Commission's decision stated that it was illegal to prohibit devices and interconnections, in the absence of a showing that they are harmful to the telephone network.

In response to the Commission's decision, the telephone companies have filed new tariffs to permit use of customer-owned terminal devices and interconnection of private systems, subject to a number of limitations which the telephone companies say are necessary to protect the integrity of the switched network. These limitations would require the customer to comply with technical specifications set forth in the tariff; and to use a protective interface device and a network control signalling unit supplied by the telephone company.

These protective measures, some of which are still under challenge before the Commission, would appear to reduce in importance the issue of "system integrity" which has long been the basis for excluding private equipment and systems from use with the switched network. If so, the path would be cleared for the development and use over the switched network of a wider range of terminal devices (particularly specialized terminal equipment necessary for transmitting data) and perhaps also of private communications systems.

D. We Agree With the Consensus of Views Presented by the Parties to the Computer Inquiry that Remote-Access Data Processing, or Teleprocessing, Does not Presently Exhibit Characteristics Justifying Comprehensive Public Utility Regulation

The filings in the FCC's computer inquiry have illuminated problems of competition and entry in the field of communication with and among computers. Although it will be many months before the Commission issues a report, it is not too soon to comment on the issues of policy raised in this pioneer inquiry.

There has been some talk of nationwide "computer utilities." This notion assumes that economies of scale in computation and the advantages of shared equipment are so great that eventually most users will find it economic to procure data processing from a single central computer, or perhaps from a few regional computers. However, this vision of the future overlooks the fact that computer costs are declining more rapidly than the costs of long-haul transmission. Although computer time-sharing will undoubtedly increase from its present level, the long run balance between the cost of duplicating data storage facilities and the cost of gaining access to a central computer favors the first option. Moreover, teleprocessors are far from overcoming the high costs of managing a time-sharing system, especially one that serves users with diverse processing requirements.

A wide variety of computer services and a healthy pace of entry exist in this field. At this time, it appears that all but the most highly specialized computers will be able to operate at full capacity without seeking a regional or national market. Under present circumstances, our studies provide no basis for recommending the comprehensive regulation of rates or entry in the computer business on the basis of public utility principles. Of course, the FCC's comprehensive computer inquiry will provide more definitive answers, and may reveal specific problems requiring regulatory action. Furthermore, as technology continues to push forward, the factual basis for our current judgment may change. But considerable time remains before such issues become acute.

1. *Under present circumstances, the telephone companies should not be permitted to offer teleprocessing.*—In our view quite properly, AT&T has disclaimed any interest in becoming a data processor. This policy is consistent with the principles that its scope of operations should be limited to the area for

² In re Carterfone, 13 F.C.C. 2d 420 (1968).

which its public franchise is justified—in this instance, the management of the integrated public message communications network, and related communications services. The economic strength of a protected market should not be used to gain advantage in tenuously related competitive markets.

To be sure, this principle might lead to uneconomic results if the Bell System's new computer-like circuit-switching system (ESS) were adapted to perform some data processing either as a secondary function or in off-peak hours. However, the ESS, designed for the primary function of analog circuit switching, and with its memory and control completely occupied by specialized telecommunications programming, could not be efficiently adopted for general-purpose data processing. While a policy of excluding the telephone companies from data processing may require reexamination if future generations of computerized switching centers exhibit enormous economies of scale, it seems sound for the present.

2. *We find no convincing case for extensive regulation in store-and-forward switching and in hybrid data processing/store-and-forward switching services.*—At some future time, the telephone companies' switching computers may become the most efficient instruments for store-and-forward switching. A single systems manager may be required for an interconnected network of store-and-forward switching and data-processing computers cutting across industry lines. But the prospect is remote. Certainly it will not come until the message telephone system is completely digitized. In part because of its great expense, computerized store-and-forward switching has grown up only within single firms, governmental agencies, or among closely connected entities. Today, store-and-forward switching is primarily an incidental feature of teleprocessing services which already provide leased line connections between terminals. Even the few common-user systems provide only in-house communications; they do not connect terminals belonging to different customers.

A single store-and-forward carrier would have to accommodate, on a single set of facilities, terminals with diverse line-speed, response-time and storage requirements. Such diversity would add to the costs of the system, offsetting the economies of scale of a single supplier. Most firms avoid these diversity costs through in-house or intra-industry systems where limited compatibility problems arise, and where the user of users association can provide whatever coordination is necessary. On the basis of our studies, we cannot conclude that store-and-forward switching should now be provided by the telephone companies, or that the numerous firms which provide it need now be regulated as common carriers.³

The principal complications for policy at this time have arisen from Western Union's vigorous entry into store-and-forward switching via the SICOM and INFOCOM offerings⁴ and its desire to provide hybrid data processing/store-and-forward switching services. Since neither pure store-and-forward switching nor hybrid services seem to involve natural-monopoly elements, it is doubtful that only regulated carriers should be permitted to make such offerings. As discussed more fully in Section IV, however, we see no reason to exclude Western Union from either store-and-forward switching or hybrid services.

E. Subject to Appropriate Technical Standards, Line Brokerage and Sharing by Companies Providing Store-and-Forward Services, as Well as Line Sharing by Any Private Line Customer, Should be Permitted

Line sharing and brokerage for purposes of store-and-forward switching are essential to promote promising new computer services on a competitive basis. Firms that supply teleprocessing and data retrieval services lease lines from carriers to connect their customer terminals to a central computer. Under existing brokerage restrictions, these firms are forbidden to allow their customers to satisfy a potentially wide range of communications needs among themselves. Relaxation of this restriction would permit reductions in costs to these customers through more efficient use of their facilities, and would permit the firms to offer store-and-forward switching services using the same computers.

The line sharing prohibition retards development of another important function: the collection of individual signals for transmission to distant terminals. Individual teleprocessing firms are allowed to collect signals from authorized-

³ Some day specialized switching service for data users may become a natural monopoly at least within a particular geographic area. When teleprocessing moves to a separate digital network with time division switching, economies of scale may become very strong.

⁴ SICOM is a specialized store-and-forward message switching service for the investment community; INFOCOM is a similar service for general business users.

user terminals. However, as a consequence of the line sharing prohibition two or more firms cannot jointly share these lines.⁵

Since leased lines are not interconnected with the public message telephone switched network (and with a fully interconnected network of store-and-forward switching computers a remote possibility) there are no overriding considerations of system integrity to support the tariff prohibitions. Nor do these specialized teleprocessing networks offer a threat of becoming an alternative to public message telephone service. Even when consumer teleprocessing service develop (e.g. computerized banking) they seem destined largely to utilize the switched network, with the touch-tone telephone in many cases generating the necessary data signals. Therefore, leased line networks will remain a costly communications medium limited to users who exchange large amounts of data, while the telephone network will remain indispensable for general purpose two-to-two communications.

A more substantial concern underlying the traditional restrictions on sharing, resale or subdivision of private lines is fear of line arbitrage which would erode the carriers quantity discount tariffs. If a middleman could buy in bulk at the Telpak rate and resell to small users, a pricing structure which discriminates in favor of large users could be seriously eroded. But we cannot regard this a major problem. In fact, the erosion of such price discrimination may be a desirable result of our recommendations for competitive opportunity. By the same token, we find no persuasive reasons for placing limitations on the sharing, brokering, or channelizing of individual private lines in order to achieve more efficient use of these lines.

We understand that AT&T is planning to file in January 1969 a new tariff including modifications in line sharing restrictions. Presumably the FCC will reach conclusions about line sharing and brokerage in its current computer inquiry.

III. OPPORTUNITIES FOR ENLARGED ACCESS TO THE MARKET FOR COMMUNICATIONS EQUIPMENT SHOULD BE EXPLORED

Progress in the development and manufacture of communications equipment is clearly an important condition of progress in the provision of communications service. While experience in providing service is a stimulus to the development of equipment, the service in the end cannot be better than the equipment used in providing it. National communications policy should be concerned that every potentiality for improvement in equipment is fully exploited.

The telephone industry is characterized by a structure of vertical integration. Western Electric, a wholly owned affiliate of AT&T, supplies nearly all the equipment (either through direct manufacture or through outside purchase) to the rest of the Bell System. A similar relationship exists between General Telephone's operating companies and their manufacturing affiliate Automatic Electric.

The question has frequently been raised about whether these kinds of affiliations are most conducive to technological advance, good service commensurate with needs of users, and low cost. In addressing this question we find a number of conflicting arguments.

On one hand, the carriers claim that affiliation is justified by special considerations which do not necessarily apply in other industries—where comparable ties are forbidden. In particular, Bell officials maintain that the unsurpassed quality of communications service in the U.S. is made possible by the Bell System's ability to coordinate closely research, development, design, manufacture, and operations. They argue that teamwork among the Bell Laboratories, Western Electric, the operating companies and the Long Lines division has yielded the optimum results in service to customers—as measured by costs, quality and prompt availability of services. Moreover, they maintain that manufacturing affiliation does not foreclose competition, since about one-half of the approximately \$3 billion in annual sales by Western Electric to the rest of the Bell System represents procurement by Western Electric of supplies, materials, and equipment on a competitive basis from outside firms.

⁵ Authorized users are customers of the firm leasing a line from the carriers. Authorized users are allowed to use the line for communication with the lessee, but not with one another or even between branches of their own organizations.

On the other hand, some maintain that independent manufacturers are deterred from attempting greater access as a consequence of the industry's structure of ownership. This, they argue, constitutes a serious loss on grounds that, among other things, manufacturers not affiliated with carriers have made very substantial technological breakthroughs in telecommunications markets where entry is free—notably in satellite communications. Moreover, they argue that even if operating companies were required by law or company policy to purchase through competitive bidding, the intimate relationship between the operating and manufacturing arms of each system would make it difficult for outside suppliers to make their maximum contribution.

In the very brief time available to the Task Force, we have found mixed and only fragmentary evidence relating to the effects of vertical integration in the industry on innovation and market behavior. In theory, the carrier's control of manufacturing could lead to a variety of undesirable consequences, such as uneconomic pricing, inadequate response to opportunities for innovation, and inefficiency. We have no convincing evidence that the performance of the principal manufacturer, Western Electric, has exhibited these tendencies. Moreover, we lacked the time and resources required to seek meaningful comparisons, taking into account all the relevant factors, between Western Electric's profits and performance and those of independent firms.

Dissolution of the ownership ties between Bell and Western Electric has sometimes been suggested as the best way of obtaining the full benefits of diversity and competition for the industry. In view of time constraints, we have not had the opportunity to study this question in depth or to evaluate critically the arguments that an extensive degree of vertical integration is necessary. On the basis of the limited studies which our timetable has permitted, we are not in a position to make a firm recommendation on the question one way or the other.

It is, of course, outside our competence to express a judgment on the AT&T-Western Electric tie regarding its consistency with the antitrust laws. That issue must be left to the Justice Department and to the courts.

The question of dissolution aside, we favor access by outside suppliers to the widest extent feasible. For the lesson of experience in most industries is that innovation is a function of diversity and competitive pressure. While the high degree of automation and requirements for system design once placed the telephone industry apart from the rest of the economy, these characteristics now typify other industries as well. With the convergence of communications and computer technology and the growth of the aerospace industry, a number of firms have potential as innovators and manufacturers in the field of advanced communications equipment.

We believe that public policy, and enlightened company policy, should seriously explore every possibility of enlarging opportunities for competitive access to the market for communications equipment, beyond the present level of outside market procurement by the carrier affiliates. Clearly, it is in the public interest to make certain that where and when competition can provide such carriers with equipment that meets compatibility, technical and operational standards, and that is less expensive than the equipment of an affiliated manufacturer, the carrier should purchase accordingly.

This implies that information on future procurements be made as widely available as is practicable. It implies also that when systems have passed through the development stage, stable components, where feasible, be broken out for procurement in the open market.

IV. INSTITUTIONAL AND REGULATORY CHANGES WITH RESPECT TO THE OPERATIONS OF WESTERN UNION APPEAR DESIRABLE

A. In Order to Maintain a Viable Public Message Service, Cost Reductions are Essential. Partial Consolidation of this Service with the Post Office Should be Explored

Western Union is now principally engaged in four related fields of activity—the provision of a public message telegraph service (PMS), a teletypewriter exchange service (Telex), private line services, and an increasingly active role in teleprocessing. As is well known, its public message service has been declining in volume. Although other factors have played a role in the decline,

the reduction of rates for long distance telephone service relative to the constantly increasing rates for telegraph service is one of the paramount causes of its present condition. Since that trend is likely to continue, we doubt that PMS as presently organized has a bright future.

Among the possibilities for strengthening PMS, perhaps the most promising would involve partial consolidation of telegraphic services with the U.S. Post Office.⁹ If the public message service were to have a service counter in all or most local post offices, the cost could be less than Western Union presently incurs in maintaining its own offices. Yet the coverage would be much greater because the number of post offices is more than double the number of telegraph offices. Moreover, consolidation of PMS's messenger crew with the Post Office's much larger force might result in additional savings.

We have not attempted to explore the many questions of detail that must be resolved prior to even a limited consolidation of postal and telegraph services. We are convinced, however, that it is a realistic and attractive objective whose consideration should be a matter of high priority.

If the public message service cannot be reinvigorated through a cost-reducing consolidation, the abandonment of the service would merit serious consideration. No doubt, should nationwide PMS disappear, a record service would continue to be offered among the larger cities. The fundamental question, therefore, is whether we ascribe to telegraph service the same values as telephone service—a service whose widespread availability is sufficiently important to justify financial support, through rate averaging, in sparsely populated areas from prosperous heavily travelled routes.

B. Western Union's Status as the Supplier of PMS Deserves Further Study

A question, separate from the viability of the public message service, is whether Western Union should continue as its supplier—either through its own offices, or as a co-venturer or co-tenant of the Post Office. Although Western Union has been less than enthusiastic about PMS's prospects, it does see a minor role for the service in its own plans for becoming an integrated record carrier. As Western Union's modernization program progresses during the 1970's, an increasing portion of PMS traffic will move over the Telex network; and the two services will share with Western Union's data processing customers the store-and-forward switching capabilities of its new computers. These plans suggest that economies would exist in providing the public message service jointly with Western Union's other offerings. One of the most useful findings that might come forth from a FCC's impending investigation of Western Union is whether, in fact, PMS is most efficiently provided over these facilities.

The notion of a public message service implies public utility regulation. But Western Union's data processing ambitions have taken the company into competitive areas. Some have questioned whether Western Union will be able to amortize its \$800 million investment in computers unless it is permitted to use them for data processing and information retrieval services. In addition, the store-and-forward switching market, which it has already entered, is likely to be competitive; and there are large economies in offering this service jointly with data processing. Even teletypewriter exchange service may no longer be monopolistic, if customers may in the future have the option of buying their own terminals and employing the telephone network in accordance with AT&T's recent tariff filing.

Of course, it is not inconceivable for the same company to provide regulated and non-regulated services. But the complex accounting task of separating the cost of one service from that of another would impose a heavy burden. In view of Western Union's general pessimism about the future of PMS, it would be proper to consider alternative suppliers of the service if the FCC investigation discloses that joint economies between PMS and other services of Western Union are not substantial, and if an arrangement with the Post Office proves unattractive or unworkable. As one possibility, the telephone companies could assume responsibility for the service, either using their own widely scattered offices or obtaining office space from the Post Office and sharing its messenger force.

⁹ Some small-scale tests have been made of the use of special delivery mail for the delivery of telegrams.

C. Western Union Should be Permitted to Compete on an Unregulated Basis in Teleprocessing

Western Union lacks substantial monopoly power in other markets which it could bring to bear on non-regulated competitors in teleprocessing. The dangers to fair and effective competition from its entry into competitive markets are accordingly far less than in the case of the telephone companies. The public message telegraph service and Telex, Western Union's monopoly markets (assuming it acquires TWX), simply do not confer substantial market power, due to the ready substitutability of other services (telephone, in the case of PMS, dataphone using teletypewriters or facsimile in the case of Telex-TWX). Any monopoly power presently possessed by Telex-TWX may be eroded by the alternatives arising under AT&T's proposed new tariff dealing with the connection of private teletypewriter and facsimile equipment to the telephone network through its interface device.

Perhaps Western Union has some advantage over potential competitors in that it controls its own transmission lines; but if our suggestions on interconnection and line brokerage are adopted, these competitors will be able to subdivide bulk capacity leased from Bell or build their own transmission links. With multiplexing equipment to concentrate messages for long distance transmission over these lines, they might be able to achieve the same transmission economies as Western Union.⁷

D. If Western Union Continues to Provide Public Message Service the Recommendations of the FCC for Consolidating Telex and TWX Appear Sound

If Western Union continues to provide PMS, the consolidation of AT&T's service and Western Union's Telex service under Western Union proprietorship seems justifiable. No economic case exists for maintaining two separate services.

Whether or not transfer of TWX to Western Union is ultimately concluded, full interconnection between TWX and Telex would not seriously reduce the overall level of competition. At the same time it would reduce the level of duplication (for some companies now have TWX and Telex machines side by side), and it might contribute to the longer-run financial strength of Western Union.

E. Further Study of Western Union's Alternative Futures is Clearly Warranted

Western Union sees an important role in its future as a prototype supplier of competitive teleprocessing services. And the acquisition of TWX by Western Union has much to commend it. Teletypewriter exchange customers would be managed by the carrier that has shown the greatest interest in promoting its development; and wasteful duplication would be avoided. But the merger of TWX into Telex is not the only way of achieving the full interconnection that would be its primary benefit.

Ultimately, the question of Western Union's future in the regulated sector of the communications industry turns on issues of fact that should be resolved in the FCC inquiry. The root question remains: are PMS and teletypewriter exchange complementary to the message switching and data processing services on which Western Union has staked its future? If a teletypewriter exchange network remains viable, would it still confer monopoly power sufficient to justify the costs of regulation?

A negative answer to these questions would suggest that serious consideration be given to solutions which would enable Western Union to move forward in teleprocessing, while locating its regulated communications services elsewhere.

The situation is further complicated by possible developments in the international field. If a single international transmission entity is formed, as we recommend in Chapter Two, a new role may develop for Western Union in the provision of service functions previously performed by the international record carriers. Certainly such developments should be taken into account by the Commission and the Congress in their future deliberations about the evolving structure of the domestic and international industries.

⁷ Western Union presently obtains leased lines from Bell under special non-tariff contract arrangements at lower rates than the general tariff for leased lines available to non-franchised teleprocessing carriers. Establishing conditions for effective competition in teleprocessing may require review of this policy.

V. EFFECTIVE REGULATION, AND EFFECTIVE IMPLEMENTATION OF THE POLICIES PROPOSED HERE, REQUIRE STRENGTHENED CAPABILITIES BOTH IN THE FCC AND IN THE EXECUTIVE BRANCH

A. *Regulation of the Integrated Common Carrier Communications Network Remains Necessary. It Should be Modernized, Certain Omissions in the Communications Act of 1934 Should be Redressed, and More Stress in Regulatory Policy Should be Placed on Responsive Pricing Practices, Incentives for Cost Reduction, and Reliance on Market Incentives*

The Communications Act of 1934 is the basic charter of the communications industry and of communications policy. It was based on studies made during the twenties and early thirties, and addressed to a communications industry as archaic, compared to modern media, as the horseless carriage is to the jet plane.

To be sure, the statute has proved capable of adaptation. It has had some of the desirable flexibility of constitutional provisions, as the FCC has grappled with one after another of the problems of revolutionary change. However, the Commission has endured periods of travail, as it sought to resolve difficult and highly contentious disputes, in carrying out policies dimly articulated and directed to conditions no longer prevalent.⁸

In 1934, the communications industry consisted of disconnected sectors, each endowed with considerable degrees of monopoly power. The distinction between voice and record service is fading. Traditional telegraph service is in economic difficulty. And the telephone network is experiencing the flood tides of change involving private line and other specialized services, computer interconnections, complex relationships with various forms of television transmission, and future accommodations to the use of satellites.

Today, the industry is a dynamic combination of competitive and monopolistic markets, all related, and all going through processes of rapid transformation.

We cannot predict how the balance will evolve between competitive and the monopolistic elements of the industry. At present, responsible public policy should be directed toward maintaining and modernizing traditional methods for regulating the monopoly sector of the industry—the integrated network of public message telephone services—while prudently releasing the competitive energies of the industry elsewhere.

B. *The Communications Act of 1934 Requires Certain Amendments, in a Rapidly Changing Technological Environment, in Order to Make Effective Regulation Possible*

The basic principle of regulation in the telephone industry—as well as in most other regulated industries—is the limitation of the company to a “fair rate of return” on its investment. The rationale for controlling profits is clear and compelling. One would judge a situation highly inequitable if owners and managers could reap disproportionate profits as a consequence of monopoly power derived from a public franchise.

In reaching conclusions as to a fair return on the fair value of a carrier's rate base, even under the sophisticated and elastic tests of modern Supreme Court cases, the work of the FCC would obviously be incomplete if it had no voice over the composition of the rate base. We emphasize that the Commission should not trespass on the managerial functions of the carrier. But its regulatory functions require an adequate opportunity to review the major investments which constitute the interstate rate base.

In a capital-intensive industry like telecommunications, construction and other investment programs are the most important determinants of overall costs. Under Section 214 of the Communications Act of 1934, FCC approval was made a requirement for new lines and extensions. Today, however, large investments exist in non-line equipment. Manifestly, rational regulatory policy requires that the FCC have adequate opportunity to review these investments

⁸ Like other administrative bodies, it has a number of fundamental problems of the utmost importance to the development of the administrative process. These are issues being examined by the Administrative Conference of the United States. Our observations are confined to substantive issues of regulatory policy within the scope of our mandate.

too, in passing on the entire rate base. We recommend that the FCC, and if necessary, the Congress, take whatever steps are required to accomplish this goal.

To assure interconnection under reasonable terms, the FCC should have full jurisdiction over intercarrier agreements. At present ambiguity exists about the authority of the Commission to compel AT&T to provide facilities to Western Union and to regulate the terms of private contract agreements reached between the carriers. The Commission has concluded that it lacks clear authority to require AT&T to provide communications facilities to Western Union other than to provide a joint service to the public. In the past the FCC requested enabling legislation, which we support, to correct this jurisdictional defect. More generally, the authority of the FCC should be made broad enough both to order *any* carrier to lease or interconnect its facilities to another carrier system on appropriate terms, and to supervise the terms and conditions of such intercarrier agreements.

C. Dynamic Regulatory Policy Should Guard Against Certain Restrictive Tendencies Inherent in the Concept of "Fair Rate of Return"

Regulation depending mainly on rules for limiting profit can inhibit incentives for cost reduction. When a firm is both limited to a fair rate of return and has the opportunity to set prices in monopoly markets that will achieve a fair return, it may not be under strong pressure to reduce costs. Cost reduction would increase its rate of return, prompting the regulatory agency to require lower prices. On the other hand, if the firm is inefficient, the prospect of a fair rate of return, and the availability of secure markets from which to obtain such a return, may provide protection rather than penalty.

These issues constitute one of the fundamental challenges to policy in the field of regulated monopoly. With the inducements and external pressures that exist in competitive industries, either with respect to internal efficiency or external demand, it is difficult for a regulatory agency to gauge whether a firm is operating at maximum efficiency and providing a full range of services, at prices that most satisfy the public interest. This is especially true in cases where promising equipment designs and service alternatives can be proved attractive only after they are tested in an operational environment. Yet it is precisely here—in innovation and in service offerings—that the danger exists of the monopoly firm having less incentive to risk new approaches than competitive firms.

These observations describe certain generic economic risks in the regulatory process, apart from those inherent in the shortcomings of men and procedures. They are not intended to constitute an exact description of reality: for, in one sense, they are too gloomy. In practice, profit incentives to efficiency *do* exist in regulated industries because regulation is imperfect and at best has time-lags. Rates are set only intermittently, and the firm is allowed to keep profits made during the interim. The determination of a fair rate of return is not an automatic process; and regulators, in the exercise of their judgment, may be influenced to a degree by the performance of the firm and other considerations. And it is quite possible that the fear of potentially stronger regulatory controls in the future plays a healthy role in stimulating good performance and in inhibiting excessive exploitation of monopoly positions.

Nevertheless, regulatory agencies have not fully exploited their capacity to use rate regulation imaginatively as an incentive for cost reduction. In terms of legal jurisdiction, regulatory agencies have broad power to devise regulatory standards that provide adequate incentives for efficiency. They can disallow costs, forbid new investments, compel abandonments of service, even revoke a company's license to operate. But these powers are rarely exercised, partly because the absence of yardsticks in monopoly industries makes it difficult to detect inefficiency, and partly because the small size of regulatory staffs forces them to concentrate on traditional regulatory functions.

In our judgment, the main problems of regulatory policy in the future will not be the control of profits as such, important as this issue will continue to be, but management of that interplay between the competitive and the monopoly elements in a manner that promotes internal technical and operating efficiency, and exploits fully new opportunities—such as the computer revolution, the growth of other new and existing services, and the emergence of domestic satellites.

In treating these issues, the FCC should make fuller and more sustained use of its power to initiate and conduct long-range studies of the industry. That power is among the most important available to any regulatory body. Long-range studies of high quality such as some conducted by the FPC and the FTC could provide a desirable catalyst both in company and in FCC policies. The industry might be led to experiment with promotional rates and other technical and service innovations.

The FCC should explore promising methods of incentive regulation. As the Commission acquires experience in appraising the performance of the regulated firms through long-range studies and shorter term reviews, it may be able to perfect a system of regulation under which the carrier's profit rewards are geared to its accomplishments in reducing costs and improving service. However, such a system would be equitable only if cost and technology trends external to the firm's own performance can be factored out—a task which requires substantially more technical resources than present budgets permit.

Finally, it is important to remember that the rate of return among regulated carriers is generally lower than that of manufacturing industry in the aggregate.⁹ In part, this discrepancy is justified on grounds that the carriers are in a protected, relatively low risk position such that a "fair" rate of return is judged by regulators to be lower than that for normally competitive enterprise. If additional competitive pressures are introduced along the lines recommended in this chapter, we would expect the FCC to take this additional factor into account in fixing the allowable rate of return in the future.

D. In Certain Cases, the Traditional Approach to Pricing Communications Services Should be Altered. The Burden of Proof Regarding Costs and Demand Elasticities Should be Placed on the Carrier

As we indicated earlier, the traditional approach to pricing communications services by adopting uniform tariffs within a regulatory jurisdiction based upon aggregate system-wide costs is not consistent with permitting entry into specific private line markets on an economic basis. As a result, the traditionally broad conceptions of communications markets must give way to more direct considerations relating to the cost and demand characteristics of specific markets. The levels of aggregation and averaging must be broken apart so that pricing practices can become more responsive to particular market situations.

This change in pricing policy requires that both the carriers and the regulatory agencies devote considerable attention to determinations of the cost and demand characteristics of specific markets. In particular, the carriers must be expected to justify their pricing responses to competition by analyses of cost and demand characteristics of the particular markets where the competition exists.

Correspondingly, the activities of the Commission with respect to pricing should be expanded. It should not base its decisions on jurisdiction-wide analyses, because such an approach may result in accommodation of umbrella pricing practices. Neither can it proceed passively, thereby risking an accommodation of non-compensatory pricing. The Commission must acquire the staff capability to undertake continuing independent studies of cost, demand and market structure characteristics. In addition, the Commission should encourage further experimentation with rate structures and service conditions as a means of developing greater knowledge of price elasticities and demand characteristics.

E. The FCC Requires an Expanded Staff Capability

To deal adequately with these problems as now perceived, the FCC's Common Carrier Bureau should be strengthened. The annual budget for the entire Commission including all of its responsibilities in both common carrier and broadcasting is currently only about \$20 million. The Common Carrier Bureau is staffed by less than 100 professionals and the entire Commission has only about 70 more employees than it had 20 years ago.

F. A Stronger Executive Branch Role is Required to Complement the Work of the FCC

If the Executive Branch is to contribute effectively to sound systems planning in the communications industry, it should develop a competence which at

⁹In 1967 Bell System profits (net of taxes and interest) as a percentage of net assets were 5.79%, compared to 6.90% for manufacturing enterprise in the aggregate.

present it lacks. Chapter Nine sets out our recommendations on this important subject.

The new capability within the Executive Branch should include the capacity to engage in a variety of advisory and policy activities. It should have resources for communications systems analysis, and for long-range economic and technological forecasting. Accordingly, the new entity could become a valuable partner of the FCC through many informal consultations on policy and operational problems, and a valuable participant in regulatory proceedings, particularly if it is permitted to appear independently before the Commission in appropriate cases.

EXHIBIT 24.—*Testimony of Southern Pacific Communications Co. Before National Association of Regulatory Utility Commissioners*

AN INVESTIGATION INTO THE ECONOMIC AND QUALITY OF SERVICE IMPACT ON TELEPHONE SERVICE SUBSCRIBERS RESULTING FROM THE INTERCONNECTION OF SUBSCRIBER-PROVIDED EQUIPMENT TO THE PUBLIC SWITCHED TELEPHONE NETWORK, AND FROM COMPETITION BY THE SPECIALIZED COMMON CARRIERS IN THE PROVISION OF TELECOMMUNICATION SERVICES

I. INTRODUCTORY STATEMENT

By Notice of Investigation dated November 16, 1973, the National Association of Regulatory Utility Commissioners, hereinafter referred to as "NARUC", gave notice that it would conduct a public investigation into the economic and quality of service impact on telephone service subscribers resulting from the interconnection of subscriber-provided equipment to the public switched telephone network, and from competition by specialized common carriers. By letter dated December 10, 1973, Southern Pacific Communications Company, hereinafter referred to as "SPC", advised that it would participate in the investigation "without waiving issues of jurisdiction and appropriateness."

SPCC submits that NARUC has no jurisdiction over the parties in the present investigation and that any conclusions resulting from said investigation are without legal consequence. SPCC also submits that the present investigation is inappropriate in view of other related pending proceedings before properly constituted governmental agencies and because of the partisan position which NARUC has taken in pending litigation and proceedings.

NARUC describes itself as a 'quasi-governmental nonprofit organization.'¹ However, NARUC is not, and cannot in any way be deemed, an administrative agency, legislative body, or judicial agency. Insofar as can be determined, NARUC has received no delegation of authority or power from Congress, the Federal Communications Commission, any state legislature, or any other duly constituted governmental body. NARUC is not established or created in or by any statute. NARUC is merely an association of the regulatory agencies of the fifty States engaged in the regulation of utilities carriers. In short, NARUC is not a governmental body, and has no jurisdiction over utilities or communications common carriers. Therefore, any conclusions of fact or law drawn from the present investigation carry no legal consequence.

The present investigation is inappropriate and unnecessary in view of related proceedings pending before properly constituted governmental agencies. In Docket No. 19808, the FCC has ruled that "this Commission has primacy in authority over the terms and conditions governing the interconnection of customer-provided equipment to the nationwide telephone network. No State regulation can oust this Commission from its clear jurisdiction over interstate communications and the regulation of the terms and conditions governing such communication, including the right of subscriber interconnections."² Pointing out that there is no interstate message toll telephone service except over exchange plant used for both intrastate and interstate and foreign service, the FCC has said that it has "plenary and comprehensive regulatory authority" because of the provisions of the Communications Act, and, in the area of interconnection, "the Federal role must be controlling."³ The California Public

¹ Brief of The National Association of Regulatory Utility Commissioners, *Washington Utilities and Transp. Comm'n v. FCC*, Case No. 71-2919, and *NARUC v. FCC*, Case No. 72-1198, U.S. Ct. of App. (9th Cir.), May 5, 1972, p. 3, note 1.

² *Telercet Leasing Corp.*, FCC 74-109 (February 5, 1974).

³ *Ibid.*

Utilities Commission has instituted an investigation in Case No. 9625 into the promulgation of rules providing for the direct connection of "certified" customer-provided communications equipment to the facilities of intrastate telephone utilities. Similarly, the Utah Public Service Commission has proposed in General Order No. 98 providing rules concerning the interconnection of customer-provided communications equipment to the facilities of intrastate telephone utilities.

SPCC is a participant in FCC Docket 19808 and California Public Utilities Commission No. 9625, and has taken the position the FCC has complete and plenary jurisdiction over the issue of interconnection of customer-provided equipment with the switched public telephone network. The FCC is the proper authority to deal with these issues, having been established by Congress for the express purpose of regulating interstate communications.

The issues relative to specialized common carriers sought to be investigated in the present proceeding have been investigated in Docket No. 18920 by the FCC, which has adopted the policy of promoting increased competition among existing and new common carriers in the provision of specialized communications services.⁴ The issues raised therein are presently pending before the United States Court of Appeals.⁵ On October 4, 1974, the American Telephone and Telegraph Company (AT&T) filed a petition with the FCC seeking a complete hearing of issues pertaining to the competitive entry of specialized common carriers and seeking to defer further granting of applications to new competing carriers. By Memorandum Opinion and Order adopted December 12, 1973, and released December 13, 1973, the FCC dismissed the petition,⁶ but a petition by AT&T for reconsideration is pending before the FCC.

NARUC's efforts to investigate the same issues previously investigated in Docket No. 18920 and presently pending before the United States Court of Appeals and the FCC are thus unnecessary and inappropriate.

SPCC is particularly concerned whether the issues in this proceeding can be fairly and impartially considered and determined, and whether there can be any decision properly reached on the merits upon the matters presented to the forum, where the organization pursuing the investigation has already taken a firm, positive position as a party in various proceedings on the matters in issue. NARUC took an adversary position against specialized common carriers in the Docket 18920 proceeding, and appealed that decision to the United States Court of Appeals⁷ seeking its reversal, despite the fact that no established carrier chose to do so. NARUC has also opposed interconnection of customer-provided equipment to the public switched telephone network. NARUC is presently an active participant in the Docket No. 19808 proceeding seeking dismissal of the petition prompting institution of that proceeding. The President of NARUC, Commissioner Ben T. Wiggins, stated in the November 12, 1973, edition of *Telephony*, page 46:

"The time has come, unquestionably to call a screeching halt to further proliferation of government-sanctioned diversion of telephone company revenues into entrepreneurial pockets . . ."

Commissioner Wiggins stated that his "viewpoint is shared by most of the state regulatory officials I know and by the telephone companies."⁸

SPCC submits that, as a minimum, NARUC should withdraw from those proceedings, including the appeal from the First Report and Order in the *Specialized Common Carrier Inquiry*, where it has taken adverse positions on the issues which it proposes to try in this investigation. Since the Chairman of the NARUC Committee on Communications is a Commissioner of the Washington Public Utilities Commission, a proper regard for fairness indicates that that Commission should also withdraw its appeal from the First Report and Order if a member of the Commission is to participate in this proceeding. Not only fair play, but even the appearance of fair play, dictates that the prosecutor and the judge should not occupy the same role in an investigation. In any other proceeding in any other forum, it is clear that if the decisional

⁴ *Specialized Common Carrier Services*, 29 FCC2d 870 (1971).

⁵ *Washington Utilities and Transp. Comm'n. v. FCC*, Case No. 71-2919 and *NARUC v. FCC*, Case No. 72-1198, U.S. Court of Appeals (9th Cir.).

⁶ *Commission Policies Governing the Licensing and Regulation of Specialized Common Carriers*, FCC 73-1298 (1973).

⁷ *NARUC v. FCC*, No. 72-1198 (9th Cir.).

⁸ *Telephony*, October, 1973, p. 44.

officers did not excuse themselves under these circumstances, they would be disqualified by the appropriate governing authority. If there is to be any semblance of neutral consideration by a non-partisan tribunal, it is submitted that it is most inappropriate for the same parties who take a vigorous position on issues in other proceedings to permit themselves to preside over an investigation on the same issues. Otherwise, it will be difficult to avoid the conclusion that these issues have been predetermined before the investigation begins.

However, because it is not possible to obtain a ruling on the issues of jurisdiction and the propriety of an investigation by NARUC, SPCC is proceeding to submit the information requested by NARUC in this filing.

II. INTEREST OF SOUTHERN PACIFIC COMMUNICATIONS CO.

Southern Pacific Communications Company is the licensee and permittee of some 150 new fixed point-to-point microwave radio stations in the domestic public radio service between San Francisco and San Diego, California, and from Los Angeles, California to Houston, Texas, and East St. Louis, Illinois. Through additional construction, acquisitions, leasing, and interconnection, it will provide a nationwide system of specialized communications, oriented to meet the particular needs of business, industry, government, and educational entities, with individualized facilities tailored to insure flexibility and economy. Communications channels will be designed to provide for the transmission of data, facsimile, telemetering control, and voice, and, in addition, wideband facilities can be provided to handle extremely high speed transmission or video, as required. Services will be provided by a sophisticated microwave system, employing the most recent solid state technology in order to maximize performance and reliability and to minimize downtime. SPCC proposes to provide the full range of services which have been authorized by the Commission to SPCC as a specialized communications common carrier to meet the needs and requirements of its customers.

III. DIRECT TESTIMONY OF SOUTHERN PACIFIC COMMUNICATIONS CO.

There is attached hereto and by this reference made a part hereof the verified statement of Gerry A. Young, on behalf of SPCC in response to the specified matters of investigation raised by NARUC's Notice of Investigation.

Respectfully submitted,

THORMUND A. MILLER,
RICHARD S. KOPF,
HERBERT E. FORREST,

Attorneys for Southern Pacific Communications Co.

VERIFIED STATEMENT OF GERRY A. YOUNG

My name is Gerry A. Young and by business address is 100 Pine Street, San Francisco, California 94111. I am employed by Southern Pacific Communications Company as Manager of Rates and Economic Analysis.

My duties include, but are not limited to, economic studies of Southern Pacific Communications Company and its competitors, capital budgeting, recommendation of rates for new and existing services, financial analysis, and administration of data processing. I have been employed by Southern Pacific Communications Company since August of 1973. Previously I was employed by Southern Pacific Transportation Company as a Transportation Analyst. My duties at Southern Pacific Transportation Company were to perform engineering and economic studies of various transportation modes. I hold a Bachelor of Science in Chemical Engineering and a Master of Business Administration from Oregon State University.

This verified statement is submitted on behalf of Southern Pacific Communications Company in response to the National Association of Regulatory Utilities Commissioners' notice of November 16, 1973. This evidence is introduced to support Southern Pacific Communication Company's position that the initiation of specialized common carrier competition to the existing telephone companies is in the public interest and will have no substantial undesirable effects on any class of communications user or on the general public.

Following are the responses to NARUC's questions. In some cases, the questions are not applicable to our operation.

A. The growth and extent of the intercity communications market subject to diversion by the specialized common carriers, including:

(1) Identification of the markets on which the establishment of competitive communication transmission facilities by specialized common carriers has been authorized by the FCC, and those markets for which applications are pending:

Exhibit 1, attached, entitled "Authorized and Proposed Markets" summarizes the communications facilities which SPCC has been authorized to build by the FCC and which are pending FCC approval. The markets listed include SPCC prospective acquisition of certain other specialized common carriers to extend SPCC facilities to the East Coast. Formal applications for approval of these acquisitions have been filed with the FCC. If approved, these purchases will extend from Dallas to St. Louis via Oklahoma City, Tulsa, Springfield (Missouri). Another line will connect New York City to Boston via Albany, Hartford Springfield (Mass.) and Providence.

(2) The relative portions of the total intercity Message Toll Service (MTS) and Private Line Service (PLS) communications market represented by the markets identified in II(A) (1), above, computed on a market-by-market basis in terms of annual revenue and in terms of messages for MTS and number of lines for PLS;

This is not applicable to Southern Pacific Communications Company as we will offer only private line service.

(3) The growth of MTS and PLS since 1958 in the markets identified in II(A) (1) above, computed on a market-by-market basis in terms of annual revenue and in terms of messages for MTS and number of lines for PLS; and the aggregate growth of MTS and PLS since 1958 on a nationwide basis computed in the same manner;

This is also not applicable to Southern Pacific Communications Company.

(4) The forecasted growth of MTS and PLS on a nationwide basis computed in terms of annual revenue and in terms of messages for MTS and number of lines for PLS, and on a market-by-market basis for the markets identified in II(A) (1), above, computed in the same manner; forecasts should be made in time frames of five, ten and fifteen years and should separate the traffic forecasted for the specialized common carriers, assuming alternately that

(a) Present MTS and PLS pricing formula remain essentially unchanged, and

(b) MTS and PLS pricing formulas are changed to meet the rates and services of the specialized common carriers.

As a company which offers private line service only, we of course have no MTS service. Our private line service was just initiated so we cannot provide present revenue and channel fills, or growth since 1958. Exhibit 2 entitled "Forecasted Private Line Service Markets" is the requested projection of private line channels and revenue for 5, 10 and 10-year periods. Section One serves to forecast the channels. It is based essentially on 15 per cent annual growth for the next 10 years with 10 per cent annual growth thereafter. For each market the equivalent voice channels are projected on this basis. It should be noted that these are maximum growth estimates, and that minimum growth estimates would be projected at 5% annually.

Section Two, entitled "Forecasted Annual Revenue" is derived from the channel fills in Section One, the expected average customer mileage within each market, and an estimated monthly revenue per channel mile of \$.55. The projection assumes that both specialized common carrier and AT&T rates are at their present level. No inflation in prices is included.

(c) The impact on the MTS and PLS rate basis resulting from competition by the specialized common carriers, including—(1) Changes in non-traffic sensitive costs, and (2) Changes in traffic sensitive costs;

To the extent that specialized common carriers divert private line service from established carriers (in addition to the new demand stimulated by innovative SCC services) the fungible portion of PLS plant may be used for MTS service. This fixed plant in existence should be regarded, in the short-run, as non-traffic sensitive, but will be absorbed because of the continuing growth

of the established carriers' MTS and other services. Traffic sensitive costs such as MTS switching are presumably sold at compensatory rates with an appropriate contribution. A loss of service will result in a reduction of costs to supply that service.

Additionally, to the extent that a carrier's rate of construction of new facilities is slowed, less additional external financing is needed. This will serve to hold down the embedded cost of debt to the carrier, and should act to minimize future rate increases due to high fixed charges.

C. The impact under current separations procedures on interstate and intrastate revenue requirements by regulatory jurisdictions caused by changes in telephone company investment and expenses due to competition by the specialized common carriers;

SPCC is not aware of any adverse demonstrated effect upon revenue requirements caused by changes due to competition from the specialized common carriers. However, a California Public Utilities Commission study of Pacific Telephone and Telegraph's private line offerings indicate that PT&T actually loses money providing private line service. This will be discussed more fully in answering question D. If so, the relatively small amount of private line services which SPCC would possibly divert will enable PT&T to forestall additional capital expenditure while not foregoing any profit.

D. The impact under current Bell-Bell and Bell-Independent settlement practices on the division of interstate and intrastate toll revenue, and its consequent impact on local service revenue requirements by those companies, caused by changes in investment and expenses due to competition by the specialized common carriers;

This question will be answered first as it would impact a company such as Pacific Telephone and Telegraph (PT&T). I will then consider the possible effect on AT&T Long Lines.

SPCC's anticipated revenue is insignificant compared to PT&T's private line revenue. SPCC expects in 1974 approximately \$260,000 in private line revenue within California. Of this, only about \$134,000 is intrastate revenue. According to a California Public Utilities Commission staff exhibit (Application No. 53587 "Report on the Separated Results of Operations of the Pacific Telephone and Telegraph Company", Sesto F. Lucchi) PT&T's estimated 1973 private line revenue is about \$38.4 million. Projecting this at a 15% growth into 1974, SPCC could expect approximately three tenths of one per cent of PT&T's revenue. Even by 1977, when SPCC will have approximately \$1 million in intrastate private line revenue, PT&T, projecting at the annual growth rate of 15% will have about \$67 million in revenue. Thus, SPCC's market share as compared to PT&T would be about 1.5%. Furthermore, we expect that much of this revenue will be from customers who previously did not use private line service and, therefore, their revenue will *not* be diverted from PT&T. It is easy to see that PT&T can make no valid claim that a significant revenue diversion will occur due to commencement of intrastate operation by SPCC.

Actually, instead of suffering a one-sided loss of revenue due to our operation, PT&T by 1977 can expect almost \$1,000,000 in additional intrastate revenue from local distribution facilities. This amount assumes that the rates for local distribution facilities will not increase within the next five years. Obviously, an increase in local distribution facility rates would inflate this figure.

Furthermore, the profit contribution made by PT&T private line is insignificant or negative, and serves only to dilute the average rate of return earned by all PT&T services. Private line service thus can serve only to act as a justification for higher rates to telephone users in general.

According to the same CPUC staff exhibit referred to earlier, PT&T has either a .43% rate of return or a *negative* 2.03% rate of return depending on the basis of analysis. (Chapter 7, page 1-2, paragraph 4, lines 10 & 11 of Mr. Lucchi's previously cited exhibit). Therefore, if PT&T did lose significant amounts of private line revenue to specialized common carriers, the subscribers to other telephone services will be benefited by the reduction of a loss.

As regards the effect on ATT's Long Lines Department, the effect of competition by the specialized common carriers will be, I believe, largely to hold down the expenses of additional high-cost construction of new facilities, and to reduce the necessity of adding high-interest debt, as discussed in (B) above.

E. Whether competition from specialized common carriers will necessitate departure from nationwide rate-averaging for PLS, and, if so—

(1) The implications of such departure for MTS, and

(2) The impact of such departure on the economic development of rural areas and the concentration of population in metropolitan areas;

(1) As American Telephone and Telegraph has already filed its Hi-Lo tariff, it is apparent that AT&T believes this departure from nationwide average was necessary. However, AT&T's history indicates that private line users have been neglected until AT&T's hold on their revenue is threatened. For example, after the decision which allowed private microwave systems to be built, AT&T initiated TELPAK in an attempt to retain bulk users, to discourage them from construction of private systems. It must be seriously doubted, however, whether the degree of AT&T's present reaction to anticipated competition from the specialized common carriers is justified. In light of the small extent of the diversion to be expected from AT&T's private line service (pp. 4-5, *supra*), the substantial reductions in Hi-D routes cannot be properly related to the potential loss which can be attributed to specialized carrier competition.

(2) Southern Pacific Communications Company intends to use nationwide rate averaging (i.e., the rate for a user of a given service will be the same from Sanderson (Texas) to Yuma (Arizona) as for New York to Boston).

AT&T chose on its own initiative to depart from its nationwide rate averaging, for reasons which SPCC does not concede are valid.

To hold the specialized common carriers responsible for ATT's unilateral action would be extending causality beyond the bounds of reasonableness.

F. The impact of the quality of service to telephone subscribers and customers of specialized common carriers, including—

(1) Comparative services provided by telephone companies and the specialized common carriers;

(2) Availability and quality of service in the event of financial failure by a specialized common carrier;

(3) Availability and quality of service in the event a catastrophe damages or destroys communication transmission facilities.

(1) The quality of service to subscribers of specialized common carriers should significantly increase due to the added competition in this field. Despite AT&T's repeated assertions that specialized common carriers offer no new services and are merely price cutters, SPCC, for example, offers two new services, heretofore unavailable to private line users. One of these, "Scheduled Metered Time", is designed to allow the relatively small company with a requirement for point-to-point communications to reserve a private line at a relatively low monthly rate, paying essentially on an hourly basis. Another new offering, "Voice Plus", allows the subscriber to a voice grade private line to include at a small extra charge simultaneous low speed data capability on the same channel. SPCC will introduce other new offerings in the near future to assure that despite AT&T's reluctance to initiate subscriber oriented services, subscribers will have the opportunity to select a private line offering closely suited to their communications needs.

The effect on MTS users of AT&T services who do not switch to SCC-provided private line should be nonexistent or minimal. The FCC in Docket 18920 (29 FCC 2nd at 285) estimated "the proportion of AT&T service that is vulnerable to competitive inroads to be in the order of two to four percent of its existing total business." As the Commission was speaking here of gross sales, the effect on other AT&T users would be much less than this. Since operating income as a percent of gross revenue is 17.2¹ percent, we can see that the net income diversion from AT&T would be only .96 percent at most.

Since the putative contraction of MTS would reduce investment requirements, the net income needs of AT&T would be correspondingly reduced.

(2) The effect on users of specialized common carrier service which might result from financial failure of a specialized common carrier is, of course, difficult to predict. It seems likely, however, that in the event that a specialized common carrier did fail financially, another specialized common carrier would find it profitable to purchase the assets and operating rights of that company in order to extend its own system. Thus, the effect on customers would likely consist only of a minor change in rates and services offered.

¹ Annual Statistical Report for 1972, AT&T, p. 4.

(3) The effect on a user of specialized common carrier services resulting from a catastrophic failure of the SCC systems would obviously be a temporarily interrupted service. However, this effect could be minimized by interconnection of the specialized common carriers, which will provide route diversity and, therefore, an emergency backup system which could be resorted to in the event of such failure. Also since the U.S. District Court Decision No. 73-2499 allows "piece-out" service from AT&T to be leased by SCC's, AT&T's own diverse system can provide an emergency backup. Conversely, it should be noted, SCC systems serve as a backup for failures in AT&T's transmission facilities.

STATE OF CALIFORNIA,
City of San Francisco, ss:

Gerry A. Young, being truly sworn, deposes and says that he has read the foregoing statement, knows the facts thereof, and that the same are true as stated.

GERRY A. YOUNG.

Subscribed and sworn to be this 5th day of February, 1974.

GENE H. ELLINGER,
Notary Public, California.

Principal Place of Business in City and County of San Francisco, State of California.

My Commission Expires July 11, 1975.

Exhibit 1.—Southern Pacific Communications Co., Authorized and Proposed Markets

1. AUTHORIZED BY FEDERAL COMMUNICATIONS COMMISSION

- a. *San Francisco—Los Angeles.*—Includes: San Francisco, Oakland, Stockton, Merced, Fresno, Bakersfield and Los Angeles. Status: In Operation.
- b. *Los Angeles—Tucson.*—Includes: Los Angeles, San Bernardino, San Diego, Mt. Davis, El Centro, Yuma, Phoenix and Tucson. Status: Under construction.
- c. *Tucson—El Paso.*—Includes: Tucson and El Paso. Status: Construction pending.
- d. *El Paso—San Antonio.*—Includes: El Paso, Sanderson, Del Rio and San Antonio. Status: Construction pending.
- e. *San Antonio—Dallas.*—Includes: San Antonio, Houston, Byran, Corsicana, Fort Worth and Dallas. Status: Under construction.
- f. *Dallas—St. Louis*¹.—Includes: Dallas, Ft. Worth, Oklahoma City, Tulsa, Springfield, (MO), and St. Louis. Status: Construction in progress.
- g. *San Francisco Peninsula.*—Includes: San Francisco, Palo Alto and San Jose.

2. PENDING FCC APPROVAL

- a. *San Francisco—Sacramento.*—Includes: San Francisco and Sacramento.
- b. *Luling—Austin.*—Includes: Austin.
- c. *Boston—New York*².—Includes: Boston, Springfield (Mass), Worcester, Providence, Hartford, Albany (NY) and New York City. Status: Construction permits have been approved as a video route. New approval must be gained for voice/data operation.

¹ This section is currently operated by United Video. Southern Pacific Communications Company is applying to transfer control of United Video to Southern Pacific Communications Company.

² The original construction permits were granted to Video Microwave, Inc. VMI's acquisition by SPCC has been approved by the FCC.

SOUTHERN PACIFIC COMMUNICATIONS CO., FORECASTED PRIVATE LINE SERVICE MARKETS

Market	5 years	10 years	15 years
1. Forecasted private line (equivalent voice) channels: ¹			
San Francisco-Los Angeles.....	1,706	3,431	5,526
Los Angeles-Tucson.....	1,645	3,309	5,329
Tucson-El Paso.....	1,102	2,216	3,569
El Paso-San Antonio.....	944	1,899	3,058
San Antonio-Dallas.....	1,193	2,400	3,865
Dallas-East St. Louis.....	1,278	2,571	4,141
San Francisco-Sacramento.....	897	1,804	2,905
New York-Boston.....	1,420	2,856	4,601
2. Forecasted Annual Revenue: ²			
San Francisco-Los Angeles.....	\$3,952,000	\$7,948,000	\$12,801,000
Los Angeles-Tucson ³	4,126,000	8,299,000	13,365,000
Tucson-El Paso.....	1,927,000	3,876,000	6,242,000
El Paso-San Antonio.....	3,364,000	6,768,000	10,899,000
San Antonio-Dallas ⁴	3,260,000	6,558,000	10,561,000
Dallas-St. Louis.....	4,593,000	9,240,000	14,883,000
San Francisco-Sacramento.....	438,000	881,000	1,419,000
New York-Boston.....	1,771,000	3,561,000	5,737,000
Total.....	23,431,000	47,131,000	75,907,000

¹ Based on 15 percent annual growth for next 10 years, followed by 10 percent growth. This may be considered maximum growth. Minimum growth would be projected at 5 percent annually. This would result in the following proportions: 5 year forecast equals 0.833 times maximum; 10 year forecast equals 0.529; and 15 year forecast equals 0.419. Hence, the projected 15th year revenue would be \$31,805,000.

² This projection assumes that rates are at their present level. No inflation in prices is included.

³ Includes San Diego.

⁴ Includes Austin.

Rebuttal Testimony of Southern Pacific Communications Co. (February 27, 1974)

VERIFIED STATEMENT OF GERRY A. YOUNG

My name is Gerry A. Young. I am employed by Southern Pacific Communications Company as Manager of Rates and Economic Analysis. I have previously offered sworn testimony in this investigation.

This statement is submitted in response to the direct testimony submitted by various interested parties in the NARUC investigation. Most of the rebuttal contained herein is in answer to certain charges and allegations which various AT&T employees made in their verified statements.

Certain independent telephone companies, notably Continental Telephone Company, USITA and United Telephone System, presented direct testimony. As could be expected, materials contained in their statements dealt with certain detrimental consequences which they expected would occur with the advent of "interconnection" companies and specialized common carriers. One item of interest contained in the testimony of the independent telephone companies was the high density nature of the Bell Systems. (USITA statement, page 2: ATT has 83.4% of the telephones, but only 41.9% of the land area).

REBUTTAL TO AMERICAN TELEPHONE & TELEGRAPH TESTIMONY

Testimony of Mr. Joe H. Hunt

Mr. Hunt in his verified statement made the similar charges to those advanced by Bell in other hearings. A major contention of Mr. Hunt is that the Bell System is a natural monopoly and a strictly accountable regulated company which gives the best possible grade of service to United States communications users. Let us examine these points one by one. While it is true that establishment of a communications monopoly was necessary in the formative period of the telephone industry, this was true only because the predominant service offered was switched network voice communications. It would have been unworkable to have maintained a large number of companies, each offering switched voice service, so that a given user would have to subscribe to a number of services in order to be able to connect all those to whom he wishes to talk.

Private line communications, however, is a far different matter as there is little necessity of interconnection with other networks. Certainly, in the

United States, the large investment and technological advancements the Bell Systems has made have resulted in an effective nationwide communications system. However, to attempt to conclude from this that maintenance of a monopoly system for all services is necessary to insure that effective communications continues is specious reasoning.

Mr. Hunt also claims that the Bell System is "strictly accountable" to various regulatory bodies for its actions. This is true only nominally. No regulatory body in the nation possesses the manpower or expertise to effectively regulate an organization having the complexity and size of the Bell System, even if the Bell System cooperated in an endeavor of this sort. Mr. Hunt claims that the United States communications system is the finest in the world and cites data to attempt to prove this point. Mr. Hunt's comparison is invalid on several points. In the first place, the countries whose communications systems he compares with the United States are government owned and operated systems. To the extent that the Bell System is more cost effective or advanced than these systems, we have only succeeded in proving that the further one goes from a government owned or regulated monopoly the more efficiency accrues to the system. Also, Mr. Hunt probably realizes that to a great extent the telephone rates in foreign countries overcharge the subscriber in order to subsidize a deficit postal operation. Canada is the only country which has a system analogous to the United States. In many European countries, communications rates are set high to subsidize the postal system. This obviously works to create artificially high rates, thus distorting the ATT competition.

Also, there is no exact method of obtaining a measure of the hourly earnings of an "average worker" in various countries. Tax rates, fringe benefits, the cost of purchasing other necessary services, and many other factors enter into determination of the income which is available for telephone service. A good reference on this problem is "The Real Cost of Basic Telephone Service to the Average Worker in Fifteen Developed Countries," by Marianne Karydes of the Office of Telecommunications, U.S. Department of Commerce.

Mr. Hunt claims that the business user of communications is charged more for his service than the residential user, due to the "value of service". This is not entirely true as a business corporation, for example, can afford to purchase a full-time WATS line and with heavy usage achieve long distance calling rates far below what a private individual could attain on his own phone.

Mr. Hunt's claims are based on the assumption that the Bell System is an effective and cost effective organization. No one knows if this is true. As pointed out above, the very size and complexity of the Bell System as compared to the available staff on any regulatory commission, makes it almost impossible to tell the degree to which Bell's management structure and practices are efficient or inefficient.

Mr. Hunt claims that "promised new services" of the specialized common carriers have not materialized. Mr. Hunt is not, I believe, correctly interpreting the service offerings of the specialized common carriers. Other Bell system exhibits have also presented erroneous interpretations of specialized carrier offerings. For example, in Bell Exhibit No. 15, recently submitted for FCC Docket No. 19919 ("Hi-Lo"), substantial and inexplicable mistakes were made in calculating SPC rates. It is also apparent that it will require a certain amount of time and financial stability before the emerging specialized common carriers have a firm services. Even the innovations which SPC has introduced and plans to introduce in the future, however, show that the AT&T claim that specialized common carriers do not innovate is false.

Mr. Hunt also makes the claim that the incentive to introduce innovations in equipment is reduced by the emergence of competition. This leaves an observer at a loss to explain the new lines of Bell PBX's and teletype equipment which have emerged since the time "interconnect" companies began operations.

Testimony of Mr. Fox F. Stoddard

Mr. Stoddard's testimony, consists of the same Bell arguments which Bell has been using in depending its position in other hearings. The first point of Mr. Stoddard's testimony is concerned with the purported "economies of scale" which he believes Bell enjoys on their so called "high density" routes. In support of this, he lists investment costs for various types of carriers and succeeds in showing that technological innovations have indeed brought down

the cost of long distance transmission. Mr. Stoddard does not mention any economies of scale which might exist with relation to local distribution facilities, multiplexing or other "end" costs. It is left to the reader to assume that the declining unit costs found in long distance transmission will occur uniformly throughout the entire end-to-end service along the high density route.

Another basic assumption of Mr. Stoddard's statement is that in order for users of long distance transmission facilities to enjoy declining unit costs, continual and ongoing facility growth must take place. At the same time, the Bell System is facing an increasing need for outside financing, which will almost necessarily entail either borrowing (at a rate which will significantly raise the embedded cost of debt) or issuing new equity at a price which could only result in dilution of the value of shares already held by AT&T owners. Thus, the AT&T subscriber seems to be caught between the necessity of increasing demand in order to lower costs further in the certainty that continued expansion would result in higher operating costs due to external financing.

Mr. Stoddard seems to imply that the specialized common carriers are serving all the high density points in the nation and leaving low density points for AT&T to pick up. In the first place, the specialized common carriers are serving many low density points. A few which come to mind that Southern Pacific Communications Company is serving include Merced, El Centro and Indio, California; Sanderson and Del Rio, Texas and Joplin, Missouri. AT&T, as was pointed out above, serves 83% of the United States population, but only 42% of the land area.

Mr. Stoddard is in the unfortunate position of having to rely on limited experience of specialized common carrier operation. It seems that all of AT&T's rate assumptions, including justification for the "hi-lo" filing, are based on competition against MCI in the 261 mile Chicago to St. Louis corridor. This is hardly a valid basis for changing the nationwide rate structure or making sweeping generalizations.

Mr. Stoddard notes that the initial appeal for subscribers to shift to specialized common carriers will be through price competition. Southern Pacific Communications believes that service offerings such as our Scheduled Metered Time will, in fact, attract a large number of users based on service considerations.

Mr. Stoddard apparently misunderstands the SPC tariff. One page 23 of his statement he claims SPC serves eight cities in California as of January, 1974. This is incorrect—we, in fact, served six cities (see SPCC FCC No. 1, page 36). Although this error is minor, it is symptomatic of AT&T's cursory examination of our offerings.

Mr. Stoddard points out the potentially greater price advantage of specialized common carriers in intrastate competition. Instead blaming the specialized common carriers, he should look to the awkward structure of the Bell intrastate tariffs. For example, within California, a private line furnished on an intrastate basis will be charged at \$4.02 per mile, regardless of the distance of the circuit. Since Mr. Stoddard states that the intrastate rates are profitable over long distance and unprofitable on short distance, a solution to this problem could have been to institute a step-wise series of mileage rates, such as AT&T offers in its Series 2000/3000 offerings.

Mr. Stoddard's Attachment A shows for some reason an artificially low private line growth rate. This is due to Bell's failure to segregate interstate private line revenues before 1972. If the "toll private line" revenue as cited in Bell's 1972 Annual Statistical Report were used, a growth rate of somewhat over 11% annually would result, as compared to Mr. Stoddard's 6%.

Mr. Stoddard's Attachments I and K are incorrect. Attachment I includes prospective SPC construction between San Francisco and Seattle. In fact, SPC has withdrawn its construction permits for this segment. Attachment K, for some reason, includes Redwood City and Long Beach as SPC served cities. These cities are not presently in service.

Testimony of Mr. William J. Schindele

Mr. Schindele uses the same arguments as other Bell witnesses. Mr. Schindele's analysis totally ignores the beneficial revenue effect of the local distribution facilities which SPC and other specialized common carriers will lease from established communications utilities.

Testimony of Mr. Edgar C. Gentle, Jr.

Mr. Gentle implies that declining communications costs are due to the overall ability of the Bell Systems to manage a communications network. A more objective examination of the facts would indicate that declining communications costs, if they do decline to the extent which Mr. Gentle claims, are due in large part to technological improvements rather than to the manner which Bell governs its networks. An analogy could be made here to electronic calculators. Just a few years ago electronic calculators were sold at many times the price they are being sold at now. Introduction of new technology, such as LSI, has stimulated demand and resulted in much lower prices, allowing purchase of electronic calculators to be well within the budget of an average family.

Mr. Gentle presents his Attachment B unsupported by detail or description of method. Therefore, Attachment B is an expression of his opinion only and is unsuitable as submission of evidence.

Testimony of Mr. George A. Walker

Mr. Walker's testimony is almost identical to that of Mr. Gentle. On page 36 of his testimony, Mr. Walker includes a figure of a 40% demand shift. This figure seems to be unsupported by adequate documentation and is apparently Mr. Walker's personal opinion. The same is true of his Attachment D.

GERRY A. YOUNG.

STATE OF CALIFORNIA,
City of San Francisco, ss:

Gerry A. Young, being truly sworn, deposes and says that he has read the foregoing statement, knows the facts thereof, and that the same are true as stated.

GERRY A. YOUNG.

Subscribed and sworn to me this 26th day of February, 1974.

GENE H. ELLINGER,
Notary Public, California.

Principal Place of Business in City and County of San Francisco, State of California.

My Commission Expires July 11, 1975.

EXHIBIT 25.—*Letter From Northwestern Bell to A.T. & T. Transmitting List of Key Feature Needs*

NORTHWESTERN BELL,
Omaha, Nebr., December 4, 1973.

Mr. W. SCHIAVONI,
American Telephone and Telegraph Co.,
New York, N.Y.

DEAR MR. SCHIAVONI: In response to your request for key system features needed to fill existing voids, the following list has been compiled by the five Areas of Northwestern Bell. This request is GL 73-09-171 dated September 24, 1973.

[36 separate features indicated as needed.]

If there are any questions on any of these feature proposals, Mr. L. W. Richardson is available on 402-422-8270.

Yours truly,

P. H. MORAN,
General Operations Engineer.

EXHIBIT 26.—*A.T. & T. Memo Re Introduction of BTS 718 and BTS 1434*

AMERICAN TELEPHONE & TELEGRAPH CO.,
New York, N.Y., February 13, 1973.

Subject: Packaged Key Telephone Systems.

File no.: 73-02-123.

To: Selected Marketing Department and Rate Heads Mailing Lists.

From: Marketing Director—Customer Telephone Services

Synopsis: Announces the forthcoming trial introduction of two new packaged Key Systems known as the BTS 718 and the BTS 1434.

To respond to a growing demand from the operating companies for an economical service alternative for the small business customer [8 to 35 lines]

two new packaged Key Systems have been developed. A number of new features have been incorporated, most as options, including voice paging. The attachment briefly describes the events leading to this development and provides a description of the two Systems.

First production models of the BTS 718 will be available for trial in April of this year. The introduction will be limited to two locations for the first 4 months. This concentrated geography will permit maximum supervision by all departments. After this initial period, broadening of the introduction will be encouraged to the extent permissible by product availability. Full production capability is expected in January of 1974.

The first model of the BTS 1434 should be available in the Fall of this year. More specific information is not known at this time.

Recommended rate treatment will be included as part of a final introductory package at which time final designs, firm apparatus prices and confirmed installation labor data should be known as a result of the trial installations.

Questions relating to rate or marketing matters should be directed to Herm Goedrich on 212 393-3370.

W. J. RINKOR,
Marketing Director.

Attachment.

BUSINESS TELEPHONE SYSTEMS 718 AND 1434

FOREWORD

Competitive activity is increasing steadily. The market under 50 lines has been the prime target and sales of non-Bell key systems, principally Japanese, have risen sharply since the beginning of the year.

In an attempt to discover what we need in the way of products to meet the needs of our small business customers (8 to 35 stations) meetings were conducted early in 1972 with sales people in 10 operating companies. Your people told us why your customers were going to the competition and what they needed in the way of features and price levels to keep the business with Bell.

At the direction of the Customer Switching Council, a task force was set up in June of 1972 to translate the findings into a product solution. In September, a recommendation was made to the Customer Products Council for two new systems referred to as the Business Telephone System 718 and the Business Telephone System 1434. This is the first step in this effort towards gearing up to the needs of this market place.

OVERALL DESCRIPTION

The two proposed systems are essentially large, square, packaged key systems. They were developed with two major objectives in mind. One was to incorporate a number of new features that your people indicated found much favor in the eyes of customers and added to the usefulness of the service. The second objective was to take advantage of every economy possible in the design thus permitting attractive rates for the customers. To achieve economy, the systems have *fixed* capacities and *fixed* features as described here.

The design anticipates that most customers for these systems will want their telephone systems to operate like a switchboard during normal business hours. In other words, all incoming calls will be answered by an attendant and routed to the appropriate party. Thus, all stations will pick up all lines and all lines will ring at an "attendant" station. As such, every station has direct outward dialing and, every station has the ability to pick up and transfer incoming calls making complete night service an inherent part of the system. The small and large systems have two and three dial intercom paths respectively for internal calls. To sum up, the basic service functions just like a basic dial PBX.

Finally, a number of new features are available that can be added as options. A system equipped with all the options assumes a level of service not unlike that of our Series 300 PBX.

BASIC SERVICE

Operationally, and from the standpoint of feature availability, both systems are identical. They differ only in their capacities. Either system will be available in a "basic" version. As such they will provide pickup, hold, illumi-

nation including wink on hold, tone ringer, dial intercom with voice signaling, button restoration and multiline conferencing.

Capacities are as follows: :

	BTS 718	BTS 1434
Central office lines.....	7	14
Dial intercom paths.....	2	3
Stations.....	18	34
Type station sets (button).....	10	20

STANDARD FEATURES

Pick-Up Hold and Illumination with "Wink" Hold

Operation is the same as in present key service.

Tone and Voice Signaling

Audible alerting signals in these systems will be tones produced by a speaker that will replace the conventional ringer. Two distinctly different tones will be used in conjunction with central office and the intercom calls.

On intercom calls, a calling party will be able to convey a message to the called party via the same speaker used for tone signaling. In affect, you have station paging. This station paging or voice signaling can take place while the called station is on another call giving you a two track system.

Multi-Line Conference

A station user will be able to conference two or more central office lines in any combination by depressing the appropriate buttons to lock down the line buttons desired in the conference. The design will guarantee circuit conditions that might otherwise render such a bridging arrangement inoperative, however, no provision is being made for amplification and transmission levels will be reduced as conference lines increase in number. Conferencing between intercom and C.O. lines is not provided.

Button Restoration

Station sets are being designed so that placing the handset in the cradle will cause all buttons to restore to the "popped up" position. Each time a station user wishes to answer or originate a call it will be necessary for him to depress a button. This feature is important in conjunction with multi-line conference as it restores all depressed buttons to their normal "popped-up" position, thus removing the conference connection between lines.

Dial Intercom

Intercom service will include flashing and busy lamp illumination. The BTS 718 will come equipped for two paths and the BTS 1434 for three. Each path appears on a separate pick-up button on the station sets.

To make an intercom call, station users will select an available intercom path by depressing the appropriate button. Dial tone will be heard. Upon dialing, the called and calling party will hear a short burst of tone after which the calling party can speak through the speaker located in the called party's station.

Technically, the package service could be provided without the intercoms, however, it is difficult to visualize a customer situation that would operate affectively without it. Consequently, for the purposes of trial introduction, it is being included as part of the basic system.

OPTIONAL FEATURES

Privacy

Systems incorporating this feature will give the first station off-hook on any line sole access to that line and prevent all other stations from bridging to the connection. By operation of a privacy release key, this station used will be able to momentarily disable the privacy and permit one or more other stations to bridge on the call while this key is held down.

This feature can be provided to all or any number of stations in a given system. In other words, a completely private system would be one in which every station would automatically exclude all other stations coincident with

initial seizure of a line. It is also possible to exclude only one or a few stations. Once chosen the station or stations to be excluded remain the same and are excluded by all other stations. Privacy is not available on intercoms.

Paging

Provision has been made to accommodate a paging amplifier capable of driving 10 to 20 wall mounted speakers. On the BTS 718 the paging system can be accessed by any station user by dialing the appropriate code on the intercom. On the larger system, there will be three codes reserved permitting a zone paging system.

Station Restriction

On an individual basis, stations can be arranged to receive incoming calls, originate calls on the intercom but cannot originate calls on central office lines.

Power Failure Transfer

In the event of the failure of commercial power all central office lines can be automatically tied to centrally located externally mounted ringers. They can be distributed. Calls can be answered or originated from any station on the central office line. Illumination intercoms or other features are not provided.

Night Transfer

By the operation of a key located in the attendant station incoming calls will ring at a predetermined alternate station.

Music on Hold

The system will provide terminals to which a customer will be able to provide a music or program source. This music will be heard by an incoming caller when he is placed on hold.

Pre-set Conference on Intercom

The capability to alert 5 pre-selected stations and thus establish one conference group of up to six stations is included in the package system.

Busy Field with Direct Station Selection

The attendant may be provided with a separate console housing in which a lamp field will be available which indicates a "Station Set" busy condition for each station in the system. These lamps will be mounted under buttons that will serve as an intercom direct signaling key to the station corresponding to the button.

Busy Field with Message Waiting

The same lamp field described above except that the buttons serve as a means for the attendant to activate a message waiting lamp under the hold key of the station corresponding to the button. Only one of the two consoles may be provided.

Touch-Tone

Systems will be available in Touch-Tone and rotary versions.

EXHIBIT 27.—*Excerpts From Diltberner Report of 1968*

[Office of Telecommunications Policy, Executive Office of the President, "Interconnection: An Economic Impact Analysis"]

(Page 43)

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D. CONCLUSIONS

In Task II, a number of alternative means of protection of the network have been examined, and costs have been obtained for them. The cost comparisons have been based upon a standard market, disregarding the effect of protection cost on the effective price of interconnect products, which would then be reflected in the size of the interconnect market. Thus, the total cost computed for the more expensive forms of network protection is somewhat inflated. But this point is more theoretical than real with respect to a comparison, since the reduction in

cost achieved by a more complex analysis would simply come from the consequent decrease in interconnect sales. The cost of protection per system sold would be basically the same. It is pointed out in Task II that the current requirement for network protection devices, when multiplied by the rather large anticipated interconnect sales (given a highly competitive market), becomes quite expensive and economically inefficient. A similar argument can be made for semiannual periodic monitoring, and very likely for installation certification. Other means of protection, although somewhat less positive, are significantly cheaper.

In this task the cost of protection has been computed from the standpoint of an eight year "program" of competition between the carriers and interconnect. An alternative approach might be to compute protection cost from the standpoint of the user, using in each case the anticipated service life of the equipment. This would be a fairly straightforward extension of the results of Task II; in such a summary, one might use a five-year service life for vertical services and an eight-year service life (installed life) for multiline systems.

The reader may disagree with some of the estimates of unit protection costs used in this task. It is quite possible that some of the estimates used are in error; however, in many cases the costs of protection computed in this task differ by orders of magnitude. Thus, even significant errors in the estimated unit costs would probably not affect the relative costs of the protection means.

Also, no attempt has been made in this task to assess relative harm; that is, no distinction has been made between the "harm" arising from malfunctioning equipment of different types. Clearly, a residential extension would not be capable of the same degree of harm to the network or to carrier personnel as a malfunctioning PBX. Some of the elaborate and expensive means of protection discussed in this task are clearly excessive for many forms of simple equipment: NPD's, installation certification, and periodic monitoring clearly represent too much protection for simple handsets or multiple line key systems. Further, for a single line telephone the present NPD creates a problem by requiring an outside AC supply, while the unit could otherwise operate on the central office battery. On the other hand, a large PBX with a major malfunction, or a large number of automatic dialers, might generate considerable signalling problems.

Finally, it should be noted that the primary victim of poor equipment is the user. He will very likely be the first to notice the malfunction, and the first to complain about it. And realistically, the dangers his equipment may generate will in most cases be marginal, and hardly distinguishable from defective equipment supplied by the carriers. It is clear from the results of this task that a lack of realism can add orders of magnitude to the cost of protection.

* * * * *

Pages 62, 63

4. Interconnect Manufacturers, Distributors and Suppliers

Based upon our analysis of potential maximum sales, the maximum (equivalent sales) revenues accruing to the interconnect distributor group will be in the range of \$13.0 billion over the next eight years. This represents end-user level revenues to the supplier or distributor. We would expect that the manufacturer would receive approximately 40% of these revenues, or roughly \$5.2 billion. This is a higher estimate than was made in our earlier report to the Federal Communications Commission, and is based upon new knowledge of additional equipment, not previously identified, which is likely to be provided on an interconnect basis.

5. Telephone Common Carriers

The principal functional benefits accruing to the telephone common carrier industry in the United States as a result of any form of expanded interconnect privileges will be primarily those of:

Expanded markets for selected subscriber station equipment achieved by price reductions made possible by competitively accelerated technological innovation, rather than by changes in cross subsidization.

New revenues from expanded use of telecommunication services, largely in the form of message and toll revenues, and from connecting arrangements provided to the interconnect industry.

Reduced demand for investment capital for subscriber station equipment.

Reduced pressures, and hence, reduced commitments to produce special engineered equipment to meet individual user needs (since other organizations will likely perform these functions).

6. Summary

It is most important to keep in mind that the analysis outlined in the preceding sections of Task III relates to a theoretical maximum interconnect market, (not the scenario used later), which is not forecasted to be achieved. However, this analysis was done primarily to show the relative distribution among the several classes of beneficiaries of direct savings in the most favorable interconnect environment. Our analysis here draws upon the maximum interconnect market estimates for a broader range of products/services. These are drawn from Table I of Appendix C, which provides the rationale for these maximum interconnect market estimates.

The following Table III-10 summarizes the end-users' direct-cost savings and operational benefits maximum estimates:

TABLE III-10.—1973-80 CUMULATIVE MAXIMUM INTERCONNECT SAVINGS

[Dollars on millions]

	Total	Direct savings	Operational savings
Residential users.....	\$1,691	\$1,591	\$100
Small business users.....	3,637	2,137	1,500
Medium/large business users.....	3,379	1,479	1,900
Total direct-cost savings (maximum.).....	8,698	¹ 5,198	3,500

¹ Adjusted for rounding errors.

CAUTION

These are rough approximations developed primarily to give guidelines as to the relative magnitude of direct and operational savings—as well as their distribution between user groups.

The recap of direct-cost saving benefits resulting from interconnect sales as distributed among residential, small business and medium/large business is shown in Table III-11. It shows the percentage distribution used to arrive at the totals for each user class. The break out is a product of DAI staff estimates—much of what is a matter of definition.

TABLE III-11.—ESTIMATED DIRECT COST SAVING OF BENEFIT DISTRIBUTION BY EQUIPMENT/SERVICE CATEGORIES

	Percent residential	Percent small business	Percent large business
Automatic answering and recording.....	10	90	0
Automatic dealers.....	40	30	30
Broadband switches.....	0	10	90
Business alarms.....	0	100	0
Business extensions.....	0	60	40
Call diversion/forwarding.....	60	40	0
Call screening.....	50	40	10
Connecting arrangements.....	(¹)	(¹)	(¹)
Data modems:			
Low.....	0	40	60
Medium.....	0	30	70
High.....	0	20	80
Facsimile.....	20	10	70
Industrial/environmental telemetry.....	0	10	90
Intercom PAX.....	0	70	30
Large PABX.....	0	20	80
Last number repeat-automatic dialers.....	50	30	20
Mobile telephone.....	30	40	30
Portable phone.....	60	10	10
Remote appliance controller.....	100	0	0
Residential alarms.....	100	0	0
Residential extensions.....	100	0	0
Residential intercom.....	100	0	0
Residential mains.....	100	0	0
Residential meter reading.....	0	10	90
Scrambler.....	10	30	60
Small PABX.....	0	100	0
Small telephone systems.....	0	100	0
Speaker phone.....	0	40	60
Tone/voice one-way pager.....	30	60	10
Tone-signaling data terminals.....	0	40	60
Video phone (internal).....	10	20	70

¹ Not available.

* * * * *

B. INTERCONNECT POLICY ADMINISTRATION

This section deals with the question of how the policy of permitting the substitution of customer-provided equipment for that traditionally provided by the common carrier should be administered, as determined by the probable effects on users, common carriers and interconnect companies.

1. QUALITY OF SERVICE

a. *Maintaining present tariff quality provisions*

Since few, if any, tariffs contain any detailed specification of service quality, we are not certain how one can quantitatively analyze the thesis the expanded interconnection will deteriorate service quality. However, most of the interconnect approaches which we explored, and which have been suggested by the regulatory agencies, have adequate provisions to ensure the common network from measurable service quality deterioration. One area which is not adequately covered in some of the minimal certification procedures relates to possible "pollution" of the network by calls directed to incorrect numbers, resulting from a faulty dial mechanism. It is probable, however, that this type of pollution will be self-limiting, since the user of telephone service will be anxious to maintain his own service standards—it will be primarily the user of such faulty dialing mechanisms himself who will be injured—not others. One exception is that of additional wrong-number calls which may tend to cause some additional traffic within the local exchange—limiting or blocking some calls during peak hours. However, user reports of such wrong numbers are the prime criterion for common carrier maintenance initiation today.

b. *Protection of personnel from physical harm*

Either the use of enforced technical standards for interconnection which provide for protection from physical harm of both customer and common carrier personnel, or the provision of a connecting arrangement either by the interconnect supplier or the common carrier, adequately solves this need.

c. *Impact of certification programs*(1) *Continued quality assurance of certified equipment.*

Assuming some form of type acceptance in which there is neither sample quality control nor individual unit certification of all units manufactured, it would appear that only complex equipment realistically should require periodic inspections once installed to ensure the continued quality of type-certified equipment. It does not appear desirable for regulatory bodies to directly become involved in the periodic sampling of type-certified equipment, but rather to depend upon either public reaction to improperly constructed equipment to motivate manufacturers to maintain their certification standards, or third-party inspection—and the ability to disconnect such offending systems from the network, should this prove necessary.

(2) *Assurance of proper continued maintenance.*

We believe that single-line installations are self-policing from a maintenance point of view, since the major disadvantage of improperly maintained equipment accrues directly to the end user. It has also been suggested that a maintenance contract arrangement be entered into between the end user and the common carrier. The common carrier himself may provide maintenance, or only approve the maintenance program proposed by the customer. We believe that these two alternatives are as attractive as periodic inspection by a third party, and more economical to all.

(3) *Economic viability of certification program.*

Under the proposals presently being considered, it would appear that the manufacturers of the equipment would be assessed certain charges to fully support the certification program. It would appear to be in their self-interest to continue these payments, thus ensuring the economic viability of the program.

(4) Common carriers' ability to test the remaining facilities.

The Bell System presently has the ability to test only their own network part of the private wire networks where the subscriber owns the teletypewriter connected to the end. Certainly this ability can be transferred to the telephone network without major cost, where necessary, to analyze serious problems.

(5) Assurance of continued service quality.

The advent of interconnection would not affect the continued service quality for customers with common carrier-provided equipment. This customer will be assured of this continued service quality in the same manner in which he is presently assured.

(6) Assurance of continued user protection from physical harm.

This problem was covered in sub-paragraph "b" above.

d. Responsibilities of Equipment Suppliers for Continued Maintenance

This will be largely self-regulating in that the user will want adequate telephone service and will demand adequate maintenance either by his own personnel or the equipment supplier. Doubtless, some of the local interconnect distributors may find business unprofitable and discontinue operation. It has been suggested that the manufacturers of interconnected equipment be required to guarantee parts and maintenance availability for users as a prerequisite for selling in the United States. This should provide adequate protection, at least for the larger manufacturers. We believe that the user should be burdened with the responsibility for adequate maintenance and that the "buyer must beware" of manufacturers whose long-term maintenance guarantee is not a responsible one.

e. Network Technical Changes

We believe that the common carrier is capable of making technical changes in the network without requiring that all station equipment be modified to meet the new network technical characteristics. Because of the huge installed base of subscriber equipment in the network, there is no way by which the carrier can now introduce sweeping changes either locally or nationally. To the best of our knowledge, almost all network changes have been introduced in such a way that they will accommodate essentially all previous equipments, as well as the new technical approach. This is particularly true of central offices dealing with both dial pulse signalling and tone signalling. We would anticipate that the same approach would be employed for tone ringing as opposed to interrupted D.C. current ringing. This appears to be the major technological change anticipated by the carriers in the next decade, since it affects the interface with subscriber station equipment.

f. Carrier Service Limitations to Interconnected User

If the common carrier provides service only as far as customer-owned equipment, we feel that it would have the same service responsibility for that portion of the network as for any other. We believe that if the interconnected user desired to reinstate his common carrier service, he should be treated as any other prospective customer, and not be given preferential delivery treatment.

g. Limitations on Carrier Liability for Hazards

We believe that the character of these responsibilities should be spelled out primarily in a technical way, so that the end user knows the degree of technical protection provided against such hazards from the network. If common carrier equipment fails to meet its tariff standards for protection of customer equipment, the carrier should be responsible for the replacement and damages. However, if the common carrier has provided its hazard-limiting equipment and it has worked adequately, but conditions have arisen which exceed the technical specifications of such protection, the user himself must provide insurance against such acts. Normal business and homeowner's insurance already cover such contingencies.

h. Increased fraudulent use of network

The fraudulent use of the network appears to be increasing as the proportion of the population with technical expertise increases. It is clear that it will increase substantially as a result of further dissemination of information

describing the inner workings of the network. Additional safeguards for the common carrier likely must be implemented in any case to reduce this revenue hazard. Since such fraudulent use is not directly traceable to the impact of interconnection, we believe that the cost of providing protection against it should be carried by the general rate base user.

i. Balance of payments impact

In terms of reliability of foreign equipment provided to the United States, we believe that the "buyer must beware." However, because of the increasingly high cost of maintenance, it is to the interconnect *distributors'* best interest only to sell equipment which is highly reliable. Thus, to a major extent, equipment sold to businesses is likely to be self-policing. This self-policing aspect of equipment sold to the residential user through department store chains, etc. is not as probable. To protect the residential user, it may be desirable to restrict importation of equipment unless it meets minimum standards for interconnection as established in the tariff, requiring the foreign manufacturer to prove conformance to reasonable specifications and reliability tests.

We believe that the impact of interconnection on the balance of payments goes beyond the purview of either the Federal Communications Commission or NARUC and should not be considered in their deliberations, unless given specific guidance by Congress. It is our belief, however, that an increasing share of the interconnect dollar will go to the U.S. manufacturers during the next decade—due largely to our excellence and technological lead in large-scale integrated circuitry.

2. FEDERAL-STATE RELATIONS

a. Legal authority for certification and licensing

There is dual authority between both state and Federal agencies for the certification and licensing of interconnected telephone equipment, supplies, installation and maintenance forces. The FCC can license for interstate operations, and the states for operators within their jurisdictions. This is also true of certification, although clearly the FCC could require certified equipment for interstate operations, where it would be almost impossible for the state to have a lower standard, since almost all interconnected equipment would be used for both functions. However, the states could utilize more stringent criteria than the Federal Government for these functions, if they so choose. This would have a strongly negative impact on the interconnect industry.

b. Cost support to regulatory activities

There would appear to be little doubt that there should be a split of the costs of necessary regulatory activities between interconnect equipment suppliers and interconnect users. Equipment suppliers should bear the cost of any necessary certification or conformance to technical network standards. Clearly these costs will eventually be passed along to the user. We believe that the user should be financially responsible for any activities that relate to installation, maintenance, or continuing inspection expenses reasonably incurred by regulatory activities. Periodic inspection services, should they be required, and initial installation inspection services should be accomplished with a compensatory fee to the user. We agree that these should not be borne by the taxpayer, or the entire telephone user group.

c. Division of regulatory responsibilities

The current general direction being taken on interconnect questions, in which the Federal Government provides the lead and suggests approaches for state authorities, leaving the state authorities with the privilege of either accepting or rejecting these approaches would appear to be the general delineation of responsibility which is most feasible. The recently formed Federal/State Joint Board is a proper forum for coordination.

d. Authority of States to depart from Federal guidelines

While the states can depart from Federal guidelines, if interconnected equipment is to be used for interstate traffic, clearly they must conform to Federal guidelines, as defined by the joint FCC/State Board. The other alternative, of the state having more restrictive standards, etc., also should be acceptable. However, this would lead to substantial disadvantages to the interconnect industry.

and to those users desirous of procuring interconnect equipment within those states having higher standards, more complex procedures, etc. We do not, at this time, see how a certain amount of this can be avoided, other than by instigating both legislative branch and executive branch pressures on states to conform to the Federal/State Joint Board standards.

c. Regulatory control over price and quality

It would appear unnecessary for regulatory control to be extended over price, cost, or quality of interconnected terminal equipment, beyond assurances to the regulatory body that the terminal equipment conforms to appropriate standards or to certification procedures. Since the common carriers, either directly or through subsidiaries, and interconnect firms active in the field are able to provide competitive market conditions, we see no reason for regulatory agency control of this. Rather, competition should establish prices paid by the user of telephone and data terminal (station) equipment.

f. Service complaint regulatory burden

There is no strong evidence that would suggest that this burden will be substantial. However, it would appear that some minimal control, but not full regulation of interconnect distributors may be desirable within the state jurisdiction. Licensing of these distributors would permit license revocation, if too great a level of service complaints were received. On the other hand, the state regulatory commission could instruct the common carriers to be particularly watchful of problems with equipment from specific suppliers, in order to permit rapid disconnection of clearly malfunctioning or poorly maintained equipment.

3. COMPETITION

a. Relaxation of restraints on common carrier actions

The relaxation of the antitrust restraints on the Bell System referring to the sale of equipment should likely not be undertaken, until such time as the question as to how Western Electric can be removed as the dominant factor in the American telecommunications market is resolved. In general, the common carriers can now compete effectively within current constraints. To be fully competitive, the Bell System should be able to sell its equipment to the end user. However, the Western Electric total dominance in its field, makes this approach impracticable at the current time, since the firm has the manufacturing volume and financial resources to engage in predatory price wars if it were to so choose.

b. Regulation of interconnect companies

There would appear to be no need to regulate interconnect companies as common carriers. Rather, some minimal form of licensing to give the ability of the state regulatory commissions to suspend operations of the company if excessive complaints are received would appear reasonable. We believe that the regulation of interconnect companies as common carriers would throw a totally unreasonable burden upon the state public utility commission. Further, we feel that regulation of interconnect companies as common carriers would unnecessarily restrict them in their ability to achieve the kind of technological integration of data processing, communications, and office machine functions which can provide highly desirable innovative products to telecommunication users.

c. Common carrier interconnect sales through affiliates

We would see no substantial disadvantage in permitting common carriers to undertake interconnect marketing through affiliated unregulated interconnect companies, with the exception of the Bell System. Here, the dominance of Western Electric makes this approach unacceptable, until such time as the Western Electric market dominance problem can be resolved. Short-term large price reductions by Western could ruin the interconnect distributor, and make it practically impossible to raise risk capital in the future for this form of enterprise.

d. Deregulation of terminal equipment

Deregulation of terminal equipment provided by common carriers would likely demand that this equipment be handled in an unregulated subsidiary or a third party in order to prevent cross subsidization on the use of installation and maintenance personnel, etc. Alternatively, if the common carriers were permitted to sell their equipment, clearly there could be competition for installation

and maintenance with interconnect companies which would hence be self-controlling, i.e., the common carriers could not sell or lease terminal equipment at extremely low rates and make up foregone profit on installation and maintenance functions. However, if common carriers were permitted to sell equipment, the Western Electric dominance of this market would loom as a major deterrent. Another possible alternative would be to permit Western Electric only to provide central office equipment to the telephone operating companies, and not switching equipment or telephones to the unregulated subsidiaries providing station equipment. This, however, would take Western Electric out of station equipment markets, and reduce substantially its production base, and possibly economies of scale. This conceivably could be resolved by encouraging Western Electric to sell telecommunications equipment abroad. This would aid the balance of payments, yet stimulate a strongly competitive environment in the United States between reasonably sized manufacturers. To the best of our knowledge, Western Electric (unlike most world telecommunication manufacturers) does not even attempt to sell its products outside the United States.

c. Freedom of interconnect companies to discontinue provision of service

In a competitive environment, we see no realistic way by which interconnect companies could be required to continue to provide service, unless they are given the protections of a regulated carrier. This would basically demand full regulatory control as a common carrier—which we believe is undesirable.

Rather, we believe that as a matter of civil contracts, the interconnect user must protect himself with contracts for service, or to assure himself that service is available from alternate sources. We see no substantial disadvantage in permitting common carriers to provide maintenance contract service for customer-owned equipment. Were the common carriers to charge a very high price for such maintenance contract service, they would likely get little or no business, hence, be self-controlling. If the common carriers attempted to subsidize their maintenance effort on interconnect equipment out of the rate base expenses, the end result would be that they would obtain most of the maintenance contracts for interconnected equipment. This still fulfills the FCC's stated objectives of providing the user with a choice of equipment suppliers. It is not clear that the FCC decision requires that the suppliers also maintain the equipment. This approach is used in England, where the national postal telecommunications organization maintains all customer-owned equipment. In fact, for most current interconnect distributors, maintenance is a necessary burden, rather than a profit-producing function.

In Australia, the PTT not only requires that interconnected telephone equipment be maintained by the common carrier, but it also requires that the equipment be manufactured to its specifications—both performance and interface. If this system were adopted in the United States, the problem of discontinuance of interconnect supplier maintenance service would disappear.

APPENDIX D.—ANALYSIS OF BUSINESS USER SUBSIDIZATION OF RESIDENTIAL TELEPHONE USERS

The purpose of this appendix is to analyze the maximum subsidy which is likely to be provided today from station equipment revenues of business users which could be applied to residential telephone users. In order to accomplish this objective, we must work with the best available data, which is of the calendar year 1971.

In 1971, the Bell System installed 25.3 million telephones. It disconnected 21.5 million telephones for a net gain of 3.8 million telephones.

In the same year, Bell made 4.5 million move and change order completions within its total subscriber base.

A. ASSUMPTIONS

The following assumptions have been made, which are believed to be fully reasonable, in order to complete this analysis.

1. Sixty-five percent of the total installations and disconnects were accomplished for business subscribers, and 35% were for residential subscribers. This corresponds to a move rate of 50% annually for business customers, and 10% for residential customers, roughly.

2. The average Bell System installation charge for a business telephone was \$15.00. The average Bell System move and change charge for a business telephone was \$10.00.

3. The average cost to the Bell System of installing business telephones was \$75.00. The average cost to the Bell System of a move or change of a business telephone was \$50.00. The average cost to the Bell System to disconnect a business telephone was \$15.00.

4. The number of business telephones at the end of 1971 was 34 million; the number of residential telephones was 91 million.

5. The average revenue requirements and revenues achieved by the Bell System and the independents are essentially the same, and are assumed to be those outlined in Task IV.

B. REVENUE ANALYSIS FROM INSTALLATIONS, DISCONNECTS, MOVES, AND CHANGES

In order to estimate the total revenues accruing to the telephone common carriers for moves and changes, as well as installations and disconnects, we will utilize the assumptions outlined above. In order to provide a conservative estimate, we will assume that the total number of moves and changes are only those which we have been able to find documented for the Bell System, rather than adding an additional 10-12% to these rates of moves or change to compensate for the independent telephone companies.

The business revenues may be computed as follows:

Million

25,300,000 installations × 65 percent business × \$15 for installation charges	= \$247
4,500,000 moves and changes × 65 percent business × \$10 for moves and charges	= 29
Total	276

This represents the total revenues to the telephone operating companies for "churning" in business telephone installations.

C. Expenses developed for business telephone churning:

Million

25,300,000 × 65 percent business × \$75 for installation expenses	= \$1,233
21,500,000 disconnects × 65 percent × \$15 in disconnect expenses	= 210
4,500,000 moves × 65 percent business × \$50 in move and change expenses	= 146

Total expenses 1,589

D. Net loss from business telephone churning:

Net revenues from business telephone churning	\$276
Net expenses from business telephone churning	1,589

Net loss from churning 1,313

This represents an annual loss from churning of approximately \$38.62 per business telephone.

E. ANALYSIS OF BUSINESS TELEPHONE REVENUES AND REVENUE REQUIREMENTS

Table E-1 provides our analysis of the "Monthly Separated Costs in Revenues—Business Station Equipment" which indicates that the annual revenues from business telephones is \$2,788 million annually. It indicates that the annual revenue requirements, based upon the intrastate portion of these revenue requirements (separated according to current practices) would be in the range of \$1,614 million annually.

Looking at the amount of excess between revenues and revenue requirements for business station equipment, we arrive at a differential of \$1,174 million annually. However, the losses from churning are:

Annual Status—1971

Millions

Business station annual revenues	\$2,788
Business intrastate station revenue	1,614
Gross "long-fall"	1,174
Losses from churning	1,313
Net potential subsidy for residential services	-139

Hence, with 91 million residential telephones, this potentially available subsidy represents only :

$$\frac{-\$139 \text{ Million}}{91 \text{ Million Telephones}} = -\$1.53 \text{ per residential telephone annually}$$

On a monthly basis this represents approximately —13 cents per residential telephone, as the most probable level of negative subsidy produced by business station equipment.

F. CONCLUSIONS

Loss of business station equipment to interconnect, in the maximum case of total interconnect success, would from this analysis, appear to give rise to a potential reduction of 13 cents per month or \$1.53 annually in the residential telephone service.

	Installed base (millions)	Separated local station revenue requirement	Total revenue requirement (millions)	Revenues each	Total revenues
Main business.....	4.0	\$10.93	\$43.7	\$10.50	\$2.0
Business extensions.....	3.0	.27	.8	2.50	7.5
PBX trunks.....	2.5	12.94	32.4	25.00	62.5
PBX main telephone.....	2.5	.72	1.8	4.70	11.8
PBX extensions.....	15.5	.27	4.2	2.50	38.8
Key lines (main).....	4.5	10.93	49.2	10.50	47.2
Key telephones.....	9.0	.27	2.4	2.50	22.5
Total, monthly.....			134.5		232.3
Total, annually.....			1,614.0		2,788.0

EXHIBIT 28.—Excerpt From "Scenario of Economic Impact: Interconnection"

CONCLUSIONS

It can be seen from the case analysis that considerable latitude is available to the regulatory agencies in adjusting and allocating savings. The principal benefit of interconnection has been shown to result from the elasticity of demand for vertical services; thus, increased interconnect competition forces a decrease in common carrier prices for these services, and a disproportionate increase in sales is seen to result. End users benefit by decreased prices and by wider availability of these services.

The benefits to be had from interconnection, while large, can easily be wiped out by too high a cost of protection. It is suggested that responsible agencies take a hard and practical look at the true level of need for protection, and establish protection requirements accordingly.

It is the prerogative of the regulatory agencies to establish the level of competition for station equipment which they believe desirable. The variables at the regulators' disposal include the required protection cost, the common carrier tariff responses which will be permitted, and the degree of cross-subsidization allowed to the carriers from monopoly services (such as line and trunk charges and message rate pricing). The methodology presented in this study should permit fine tuning of these variables to achieve the goals desired.

One additional case, which has not been analyzed in this study, is worthy of comment. This is total deregulation of station equipment, in which the common carriers would be forbidden to provide such services on a regulated basis. In such a case, the carriers and interconnect would compete on an equal basis in the marketplace for station equipment. One added benefit which might result under such a case would be a considerable decrease in required common carrier investment for station equipment, freeing considerable capital for upgrading the public switched network. In fact, such a case could be coupled with a requirement, for upgrading the switched plant to the limits of today's technology, using the capital which would otherwise have gone into new station equipment. The result might be a substantial increase in the variety of available station equipment, as well as substantial improvements in the switched plant.

EXHIBIT 29.—*Letter From A.T. & T. Concerning Dittberner Report Excerpts Received for the Record*

AMERICAN TELEPHONE & TELEGRAPH CO.,
Washington, D.C., September 23, 1974.

HON. PHILIP A. HART,

*Chairman, Subcommittee on Antitrust and Monopoly, Committee on the Judiciary,
Russell Senate Office Building, Washington, D.C.*

DEAR SENATOR HART: During the course of the Hearings on S. 1167 pertaining to communications by the Subcommittee on Antitrust and Monopoly, you directed, during a colloquy with the witness, that certain portions of a report prepared by Dittberner Associates, Inc. for the White House Office of Telecommunications be inserted into the record.

Due to the uncertainties as to those portions that would be placed into the record, the Bell System had not responded heretofore. We would, therefore, request that the attached letter from Dittberner Associates, Inc. addressed to the American Telephone and Telegraph Company dated July 30, 1974, and a Memorandum responding to certain portions of that report be inserted in the record to immediately follow the excerpts from the Dittberner report.

Very truly yours,

DOUGLAS B. MCFADDEN,
Executive Assistant and Attorney.

Enclosures: (2).

Enclosure 1

DITTBERNER ASSOCIATES, INC.,
TELECOMMUNICATIONS CONSULTANTS,
Bethesda, Md., July 30, 1974.

Mr. RAY BURKE,
*American Telephone & Telegraph Co.
New York, N.Y.*

DEAR Mr. BURKE: This letter is in response to our verbal discussion of July 30, 1974, in which we have agreed that it is our intent to modify Appendix D of our report "Interconnection—An Economic Impact Analysis" which was prepared for the Office of Telecommunications Policy under contract to the U.S. Government, based upon information in which you have provided to us subsequent to the completion of its contract. We intend to make this modification if we can obtain approval from the Office of Telecommunications Policy for such a modification.

We shall base this modification upon the new information which has been provided to us, out of the proprietary monthly report No. 7, from which abstracts have been made of relevant data for two years, and from other proprietary data on studies completed within the Bell System on individual months during the years 1971 and 1972. Based upon this data, we plan to recompute the impact of the total inward and outward movement of telephone and of inside moves for both business and residential telephone service, and to recompute the relative subsidy flow resultant from this overall movement. Based upon the preliminary review of the figures submitted to us, it would appear that the subsidy flow from residential to business would be either reduced to zero, or may give rise to a flow in the opposite direction.

We appreciate being able to obtain this new information which will be significant to the telecommunications community to better understand the character of the economic impact of customer-owned station equipment. We only wish that it had been possible to obtain this data during the course of the study, so that it could have been included in our original report Appendix. Please note that any change in this Appendix would not affect the main body of our report in any way.

Sincerely yours,

Mr. DONALD L. DITTBERNER,
President.

Enclosure 2

AMERICAN TELEPHONE & TELEGRAPH CO. COMMENTARY ON APPENDIX D
OF THE DITTBERNER REPORT

The purpose of this commentary by ATT&T Co. is to provide counter-evidence to Appendix D of the Dittberner Report on Interconnection prepared for the

Office of Telecommunications Policy and placed in evidence before the Subcommittee on Antitrust and Monopoly. This commentary does not probe the entire Dittberner Report but deals with a conclusion drawn in Appendix D.

The conclusion drawn in Appendix D is that business telephone service imposes a \$139 Million burden on residence service. The implication follows that a withdrawal of the common carrier industry from the business terminal market would be a direct benefit to home telephone service by the removal of the \$139 Million "subsidy".

The Dittberner Report conclusion has been characterized as being contradictory to the intuition and positions held by state regulators and the common carrier industry. That is, business service provides contributory benefits to common costs and overloads which allow home telephone rates to be low.

The nature of the accounting reports of the common carriers under the Uniform System of Accounts is such that the specific service costs and associated revenues of services are not directly available. Special economic studies are required to develop these relationships. Appendix D of the Dittberner Report is an attempt at developing the relationship between basic business service costs and associated revenues. Revenues and costs fall into two broad time-phased categories: those occurring only at the initiation of service (called nonrecurring) and those that occur month by month over the life of the service (called recurring). The Dittberner Report shows:

[Dollars in millions]

	Revenues	Costs	Net revenues (revenues less costs)
Recurring.....	\$2,788	\$1,614	\$1,174
Nonrecurring.....	276	1,589	-1,313
Total.....	3,064	3,203	-139

This analysis implies that the contribution from recurring net revenues fails to offset the losses from non-recurring net revenues.

A crucial estimate in the analysis is that new installations and disconnects for business service constitute 65% of those for all services. It is not explained how this relationship was developed. The larger common carriers report data monthly to the F.C.C. from which such a factor can be developed. A copy of this report, the Monthly Report No. 7, Bell System, December 1971, is attached. The significant data are:

TELEPHONE MOVEMENT

[In millions]

	Inward	Outward	Total
Business.....	5.8	5.0	10.8
Total.....	25.3	21.5	46.8
Percent business of total.....	23.0	23.0	23.0

Using the factor of 23% developed above, a revised estimate is obtained on Table 1 attached and can be summarized as follows:

[Dollars in millions]

	Revenues	Costs	Net revenues
Recurring.....	\$2,788	\$1,614	\$1,174
Nonrecurring.....	97	562	-465
Total.....	2,885	2,176	709

The result is in contradiction to the conclusion of Appendix D and the inferential claim of disbenefit to home service. Rather, the result clearly shows a beneficial contribution of \$709 million to overhead costs, such contribution relieving home service from having to provide such support.

1. Copy for

OFFICIAL FILE
BELL SYSTEM

MONTHLY REPORT :
Sheet 1
C.H. 62

TELEPHONES, CENTRAL OFFICES AND SUBSCRIBER LINES

PL 220-5 700

TELEPHONE - THIS MONTH

[illegible]

$\zeta \in L^1(\mathbb{R}^d; \mathbb{C})$, $\zeta(x) = \int_{\mathbb{R}^d} \hat{\zeta}(k) e^{ikx} dk$.

() Derivative of $y = x^2 \sin x$ at $x = 0$ is 0.

† Column (c) = 100% net in-lake correction of error in classification, such corrections are included in column (c). For all points of column (c) 1, 15 and 31 see Sheet 2.

FD-34 (Rev. 1-1-70)

This Copy for:

No.

BELL SYSTEM

OTHER STATION AND LINE DATA

MONTHLY REPORT

Sheet 2

O. R. 65

DECEMBER 1972

		This Year to Date					In Balance at End of Month
		a Inward Movement	b Outward Movement	c Transfers Between Classes	d Net Gain (a + b + c)	e Purchases, Sales, and Adjustments	
Teletype, radiotelegraph - Exchange - Full Speed (a)		1,745	2,637	16	(876)	3,610	
- Exchange - Total (a)		1,897	3,312	1	(1,414)	36,734	
- Private Line (b)		17,410	18,997	14	(1,573)	727	102,450
- DATA-PHONE		8,900	8,659	(4)	(163)	477	35,750
		This Month					
Exchange - Radiotelegraph - Exchange		654	9,305	-	(8,651)	6	27,000
Exchange - Radiotelegraph - Total		XX	XX	XX	XX	XX	
Exchange - Private Line		780	708	-	81	81	
Exchange - Data-Phone		3,294	3,485	(11)	(191)	(1,600)	6,000
Exchange - Total		10,628	12,881	(17)	(2,270)	4,487	60,000
Private Line - Total		15,986	16,361	(28)	(375)	(1,300)	1,200
Data-Phone - Total		3,696	3,695	(10)	(20)	(20)	
		Major Telephones and Equipments					
Outward - Terminals in Tels		737	553	7	191	36	16,000
Outward - Terminals in All Other		1,888	1,192	(14)	693	53	54,000
Inward - Terminals in Tels		263	96	1	168	1	4,000
Inward - Terminals in All Other		901	345	19	575	71	12,000
Transfers - Terminals in Tels		19	10	-	9	3	0
Transfers - Terminals in All Other		39	17	-	22	(3)	
Line - Terminals in Tels		1,041	179	-	862	(1)	35,000
Line - Terminals in All Other		16,265	15,263	134	1,116	1,194	1,500,000
Other - Terminals in Tels		39,540	17,287	6,812	29,131	2,700	1,500,000
Other - Terminals in All Other		2,750	1,225	-	1,525	(1,000)	0
Transfers - Terminals in Tels		22,700	15,200	2	6,500	(6,000)	0
Transfers - Terminals in All Other		7,000	3,000	-	4,000	0	0
Total Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Total Terminals in All Other		1,000,000	1,000,000	0	0	0	0
		This Month					
Inward - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Inward - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
Outward - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Outward - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
Transfers - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Transfers - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
Line - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Line - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
Other - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Other - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
Transfers - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Transfers - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
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Line - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
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Other - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
Transfers - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Transfers - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
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Transfers - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
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Transfers - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
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Transfers - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
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Line - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
Other - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
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Transfers - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Transfers - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
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Transfers - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
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Line - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
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Other - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
Transfers - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Transfers - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
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Line - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
Other - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Other - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
Transfers - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Transfers - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
Line - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Line - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
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Other - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
Transfers - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Transfers - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
Line - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Line - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
Other - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
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Transfers - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Transfers - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
Line - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Line - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
Other - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Other - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
Transfers - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Transfers - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
Line - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Line - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
Other - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Other - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
Transfers - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Transfers - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
Line - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Line - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
Other - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Other - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
Transfers - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Transfers - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
Line - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Line - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
Other - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Other - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
Transfers - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Transfers - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
Line - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Line - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
Other - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Other - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
Transfers - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Transfers - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
Line - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Line - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
Other - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Other - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
Transfers - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Transfers - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
Line - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Line - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
Other - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Other - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
Transfers - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Transfers - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
Line - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Line - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
Other - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Other - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
Transfers - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Transfers - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
Line - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Line - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
Other - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Other - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
Transfers - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Transfers - Terminals in All Other		1,000,000	1,000,000	0	0	0	0
Line - Terminals in Tels		1,000,000	1,000,000	0	0	0	0
Line - Terminals in All Other		1,000,000					

In addition to this revised analysis, it can be said that the Dittberner Report contains, within itself, contradictions to the conclusion of Appendix D. These statements are detailed on Table 2.

Page 75 suggests that \$5 of residential revenue requirements are subsidized by other services.

Page 82 implies a residence subsidy of \$2.35 from other services.

Page 83 implies a subsidy of residence service.

Page 78 implies that extensions and other service features are subsidizing basic residence service.

If residence service is being subsidized by other services, then clearly no positive net revenues are being generated by this service with which to subsidize business or any other service.

In conclusion, the Dittberner Report finding in Appendix D that residence service subsidizes business service is in error on a crucial fact and is contradictory to other inferential conclusions in other parts of the report. This conclusion by AT & T is without prejudice to its position regarding the accuracy of other sections of the Dittberner Report, or of any of the data and methods employed.

TABLE I

	Multiplied by—		Equals
	Percent	Dollars	
Nonrecurring revenues:			
\$25,300 installs.....	23	15	\$87,000
\$4,500 moves.....	23	10	10,000
Total.....			97,000
Nonrecurring expenses:			
\$25,300 installs.....	23	75	436,000
\$21,500 disconnects.....	23	15	74,000
\$4,500 moves.....	23	50	52,000
Total.....			562,000
			Amount
Net from nonrecurring items.....			—\$465,000
Business station annual revenues.....			2,788,000
Business station revenue requirements.....			1,614,000
Net from recurring items.....			1,174,000
Total business contribution.....			709,000

TABLE II.—QUOTATIONS FROM TASK IV

Page 75 says "When the allocated cost of residential service is compared with its flat rate residential tariff of \$8.50 per month, it would appear that *nearly \$5.00 of residential revenue requirements is subsidized by other services of the common carrier*" (Underlining added)

Page 82 says "The general implications and conclusions are that *residential main service is subsidized by approximately \$2.35 for each subscriber from other services*." (Underlining added)

Page 83 says "It is apparent that residential service is subsidized by other common carrier services whereas the individual business and PBX subscriber services are tarified to offset the separated intra-state costs."

Page 82 says "In only two areas, residential main and PBX common equipment, are the separated costs in excess of the average monthly service tariffs. In all other services and equipment allocations, monthly service tariffs are relatively higher."

Page 82 says "The common equipment on a 100 line PBX system is tarified at \$170 per month or \$22 below cost. In the case of PBX, the several auxiliary services such as trunks, console, handsets etc. . . . more than make up the difference. . . ."

Page 78 says, in referring to residence service, "any excess of costs over revenues is reduced substantially by the addition of extensions or other features. . . ." This indicates that vertical services are making contributions.

Senator HART. Our next witness is Ronald Fox.

The record should reflect Mr. Fox is testifying under subpoena served by the committee.

STATEMENT OF RONALD B. FOX, VICE PRESIDENT, MARKETING, TPI, INC., GRAND RAPIDS, MICH., ACCOMPANIED BY W. H. BORGHESANI, COUNSEL

Mr. BORGHESANI. I am counsel to Mr. Fox. With your permission I would like to sit with him.

Senator HART. You have attached to your statement a number of exhibits. I will order them entered into the record. Your statement will be printed if you want to omit anything.

If you want to add anything, it will go in.

[Mr. Fox's prepared statement appears as exhibit 1.]

Mr. Fox. Thank you, sir. My name is Ronald B. Fox. I am the vice president of Marketing, TPI, Inc., a retail distributor of telephone equipment and systems to business telephone customers. Our company is headquartered in Grand Rapids, Mich., and is a distributor for telephone equipment manufactured and supplied by Stromberg-Carlson Corp. We presently have some 100 employees in seven offices throughout Michigan and Indiana serving over 500 interconnect customers. Our company was one of the original six founding members of NATA—North American Telephone Association—and MICA—Michigan Independent Communications Association—associations dedicated to maintaining and improving the high standards of telephone service throughout Michigan and the United States.

From July 1966 to February 1971 I was employed by Michigan Bell Telephone Co. in various management capacities, initially, as a communications consultant. During the period from June 1968 through September 1969 I was a staff supervisor, Detroit marketing headquarters, responsible for classroom sales training of new salesmen, improvement of instructional techniques, research on competitive equipment and rate structures, estimating the degree of competitive impact upon Michigan Bell Telephone Co. and participating insales manager review activities.

On September 1, 1969, I was assigned as sales manager, Grand Rapids-Grand Valley districts, supervising 8 salesmen responsible for 151 major industrial and institutional accounts and approximately 3,000 medium market business accounts. In January 1971 Michigan Bell Telephone Co. divided their company into three operating areas and I was given the task of establishing a regional marketing staff providing sales, administrative, and accounting guidelines and assistance for the marketing group in western Michigan.

I resigned from Michigan Bell Telephone Co. in February 1971 after becoming disillusioned with the anticompetitive tactics being used daily and the prevailing atmosphere of paranoia relative to interconnection and the interconnect suppliers.

It is the concerted effort on the part of A.T. & T. and the Bell System to eliminate competition by interconnect companies such as

ours that I wish to address in my statement. I do so because of my concern that unless Federal legislation is passed to protect and preserve the interconnect industry A.T. & T. and the Bell System will once again assure its continued monopoly position in the telephone equipment industry, thereby eliminating the many benefits derived by the business community through competition.

In my statement I will follow a typical competitive case from initiation to present date demonstrating the under-handed tactics of Michigan Bell Telephone System to thwart sales by interconnect companies and halt future competition. From there I will outline other anticompetitive practices and will elaborate on the use of the interface couplers and the regulatory process to eliminate competition.

A typical competitive case is that of Calvin College, Grand Rapids, Mich., a private, 4-year liberal arts institution associated with the Christian Reformed Church. As their administrative communications system was somewhat antiquated and student service, for all practical purposes, did not exist, they entered into an agreement with our company in 1969 for the study and evaluation of all aspects of their telephone communications equipment, procedures, and cost. On numerous occasions prior to this, the College had requested Michigan Bell to provide centrex service, but their request had been continually rejected because the level of return to Michigan Bell was inadequate.

To summarize, this case history represents the following anticompetitive activities directed against our company:

1. Refusal for over 4½ years to furnish reliable rates for the interconnection of a privately owned centrex system;

2. Offer to furnish a customer a telephone company provided centrex system at a rate of return well below desired levels and below that provided by tariff, and, indeed, at a rate below invested cost in order to prevent the customer from going "interconnect";

3. Attempt to impose business rate trunking charges on privately owned telephone equipment users while at the same time charging the lower residential rate trunking charges to the telephone company's own customers;

4. Attempt to charge privately owned telephone equipment users for toll terminals while not similarly charging the telephone company's own customers for toll terminals;

5. Refusing to sell Bell cable facilities required for the interconnection of a privately owned telephone system for less than approximately 700 percent of the price at which new cable could be purchased from outside sources;

6. Threatening a nonprofit corporate customer with the withholding or withdrawal of charitable grants presently planned or to be made in the future in accordance with past practices; and

7. Offer by the Bell System to provide the same telephone equipment offered by the competitor at standard tariff rates but without the interface device.

Although these are the most indicative of the practices encountered by us on the Calvin College project they are in no way restrictive of the many, many other competitive practices we run into on our

day-to-day encounters with Michigan Bell. Some of these included numerous cases of harassment related to wrong directory listings, no transfer of calls from disconnected numbers, frequent out-of-service conditions on lines and interfaces, and billing errors.

The ability of the interconnect industry to function also has been inhibited by the original successful effort of A.T. & T. and the Bell System to obtain tariff requirements for the use of protective connecting devices, commonly known as "interfaces," in all instances of interconnection of privately owned or leased telephone equipment to the message network.

This requirement does not exist when a Bell company uses the same equipment for one of their installations even though the equipment, in some instances, was purchased from a foreign manufacturer or from the same supplier from whom we in the interconnect industry purchase our equipment.

The interface is widely used as an anticompetitive weapon by the Bell System. Initially, interfaces would not permit touch-tone calling or data signals to be transmitted. This restriction was capitalized on by Bell salesmen at the direction of upper management as shown in exhibit 36 to my prepared statement.

[See attachment to exhibit 1 at the end of Mr. Fox's oral testimony.]

Mr. Fox. Further it was not until mid-1974 that the Bell companies offered an interface that functioned via the standard telephone industry two-wire circuitry thereby causing the interconnect supplier additional expense, numerous repair problems, and in many cases actually precluded the sale of certain equipment, as shown in exhibit 36.

Bell salesmen are instructed to impress upon the customer that interface devices are a real cost that he must consider and that most non-Bell PBX's are manufactured to work with interface devices and will not work without them unless expensive modification of the equipment is undertaken, when in reality most non-Bell PBX's would function better without the interfaces as they have for years in areas served by Bell, General Telephone Co., United Utilities, Continental Telephone, Right-of-Way Cos., Bell of Canada, and others.

The tariff required interface devices on customer provided telephone equipment make it necessary for our company to rely on Michigan Bell's delivery and production schedules, for such equipment as Michigan Bell and/or Western Electric are the source of supply.

In making competitive proposals Michigan Bell has deliberately refused to provide reasonable delivery schedules for interface units and has unfairly utilized its position as the sole source of supply for interface indicating, as a selling point to our potential customers, that the delivery schedule for its own telephone company provided system is better even though they control delivery schedules for both types of equipment.

Installing and maintaining the interfaces is another area where Bell uses anticompetitive tactics. Michigan Bell personnel have stated that the reason we experience installation and service problems

on interface equipment is that no formal training program exists in the Bell System for interface equipment despite the tremendous number of units in service and the problems encountered. Further, on key system interfaces Michigan Bell craft personnel do not have the proper tools or test equipment specified in the Bell System practice.

Added to the delays in repairing of interfaces is the practice of billing a maintenance-of-service fee to the customer by Michigan Bell even though the problem is ultimately determined to be theirs or comes clear. Our company, in turn, must absorb the administrative and direct labor expenses associated with proving that the trouble is in the interface, which in our Detroit office alone amounted to over 1,800 hours this year.

The consumer is discriminated against because of the rate he pays for the interface device.

To give you an example of what I am referring to, in May 1973 our company's attorney requested that Michigan Bell install an STC-RC interface device to replace the interface device they were then using. This interface device was a modification of the universal interface developed by the Bell System.

However, with the modification, which basically involved the elimination of certain optional features, the interface was exactly the same in design as a similar tariffed interface device, the SU6AQ, for which a rate of \$3.75 was charged. However, Michigan Bell refused to provide the STC-RC at the \$3.75 rate and instead insisted on a rate of \$6.50 per month.

Several months after the notice to Michigan Bell of the similarity in design of the STC-RC and the SU6AQ and more than 2 years after the rate differential of \$3.75 versus \$6.50 was established by the telephone company, a meeting was held in Detroit, Mich., on this matter.

As a result of this meeting Michigan Bell agreed that there was no basis for this rate difference and further agreed to amend the tariff application then pending with respect to rates for interface devices to eliminate the disparity in prices which it subsequently did by establishing a rate of \$4.75 for the universal interface.

However, this admission by Michigan Bell did not, in any way, provide for a rebate to those customers who previously had been paying \$6.50 for an interface device that should not have cost more than \$3.75.

The competitive tactic of Michigan Bell that we in the interconnect industry believe to be the most dangerous to our survival is the attempted use by it of the State regulatory process to provide legal justification, or if you will a protective umbrella, for their anti-competitive activities.

To provide some insight as to how, in my opinion, the Bell System is seeking to eliminate competition by regulatory fiat I need only show what has taken place in the State of Michigan over the past 2 years.

On February 15, 1973, Michigan Bell Telephone Co. filed a general rate application with the Michigan Public Service Commission, asking for an overall rate increase of \$29.7 million.

Its application was supported by 365 pages of testimony and 342 pages of exhibits of which 232 pages of testimony and 230 pages of exhibits were directly related to its request for approval to completely restructure its terminal equipment rate schedule.

One of the avowed purposes for this radical restructuring of its rates was to meet the threat of competition from the interconnect companies. Attached to my testimony as exhibit 53 are pages from the direct testimony of Mr. Kenneth Hamming attesting to this fact.

Before proceeding, I would like to point out that several months prior to the filing of this rate application the State of Michigan enacted what is commonly referred to as the "Nine-Month Bill," which was instigated and strongly supported by the utility industry, including Michigan Bell. The act basically required that the public service commission render its decision on all rate applications within 9 months from the date the application is filed, or file with the Governor of the State a report explaining the specific reasons why it was not able to meet the 9-month deadline.

Unfortunately for our interconnect association and others who intervened in this case, this bill was interpreted by the hearing examiner as imposing a mandate on the commission to act within the 9-month period.

The effect of the 9-month bill and the time schedule resulting from it was to make it impossible for us or for any of the other intervenors in the case to efficiently and properly challenge the extremely complicated case presented by Michigan Bell. Indeed, the staff of the public service commission, which is looked to for technical advice and assistance by the commission members in making their decision, admitted that they did not have adequate time or manpower to thoroughly investigate the facts and subjective judgments submitted by Michigan Bell.

Thus the staff had to rely to a substantial extent on the unchallenged factual assertions and data given to them by the Bell witnesses.

What did the 1973 Michigan Bell rate case do to the interconnect industry? Without going into extensive detail in this regard, the application of Michigan Bell to restructure its rates, which was accepted completely in concept, resulted in rate reductions to those Michigan businesses most vulnerable to competition and rate increases—in one instance by over 150 percent—to those businesses who either because of the anticompetitive effects of the interface device prices or for other reasons were not vulnerable to competition.

Another example of how Michigan Bell used the 1973 general rate case to further its goal of eliminating competition was its proposal commonly referred to as the "90-Day Moratorium." Basically the proposal provided for a period of 90 days following the effective date of the new rates during which certain PBX business customers could change to a new telephone system at lower rates than charged for their old system, but without having to pay the termination charge assessed by tariff against all customers who are under contract with the Michigan Bell and who terminate their contract prior to its normal expiration date.

The major effect of this from the point of view of interconnect people was that all of the customers that Bell could convince to

change out their service had to sign new 6-year contracts which meant that each of these customers would be eliminated from the threat of competition for a period of 5 more years.

The end result of this anticompetitive proposal was that Michigan Bell was successful in signing up 102 Michigan customers to the new 5-year contracts. However, not known by anyone at the time except Michigan Bell was that these 102 customers, who are now locked into the Bell System and have nowhere else to turn for their equipment needs, were confronted less than 1 month after the expiration of the 90-day moratorium with a new general rate application.

What are some of the anticompetitive practices utilized by Bell in Michigan? With the advent of competition in 1970 the entire composition and policy of the Michigan Bell Marketing Department was changed. Massive employment and training programs were initiated for salesmen. Clerical help was added to free the salesmen so that more accurate detailed, and professional proposals could be provided.

Studies of the product line were conducted and new products heretofore unavailable were provided either by Western Electric or purchased from other suppliers such as Nippon. The machinery to establish competitive changes in the pricing structures was implemented.

Installation and maintenance intervals were shortened through interdepartmental agreements in various areas and billing, order accuracy, and other measurements were instituted, and a crash program to identify, qualify, and contact potential interconnect customers was mounted.

Indepth consulting was provided in a manner never used before to keep customers from retaining consultants who might recommend interconnection. Weekly and monthly status reports on consultant and supplier activities were submitted to upper management, and salesmen and their managers were measured on the basis of wins and losses rather than increased revenue.

Physical inventories of installed services on customer premises were begun and in many cases back charges dropped if there was a competitor involved, as happened at Steelcase, Inc., in Grand Rapids, Mich.

Overtime funds became available for use on competitive proposals and market coverage programs, computerized WATS studies were introduced, ostensibly to demonstrate how a customer could trim his long distance costs thereby insuring customer loyalty even though inhouse studies proved the customer's total billing increased by 17 percent 90 days following WATS installation. In short, it was a "new ball game" and the rule was: shut out the competition.

In 1972, Michigan Bell Telephone Co. embarked on an extensive advertising and public relations program designed to halt interconnection at the direct and indirect expense of the consumer. The Michigan media was flooded with commercials against private equipment such as the radio spots shown in exhibit 61 to my prepared statement.

Senator HART. We will have to take a brief recess so I can vote.
[A brief recess was taken.]

Senator HART. The committee will be in order.

You may proceed, Mr. Fox.

Mr. Fox. An educational campaign was launched by Michigan Bell stating that the result of interconnect would be an increase in the price of phone service to most of Bell's customers because the company would have to charge more to make up for the lost revenue—an entirely unfounded position. The same theme is carried out in Michigan Bell's house publications.

Michigan Bell Telephone Co. frequently used and continues to use half-truths to present their proposals. A typical example is the misuse of their "General Maintenance Curve." The chart relates to crossbar, electromechanical PBX's in use during the late 1950's.

It has no bearing on modern crossbar equipment or in particular solid state systems as stated in the Bell competitive training manual. Yet Bell's salesmen and managers use this chart daily to convince prospective customers that their maintenance costs on solid state and modern crossbar systems meet or exceed the A.T. & T. findings as shown on exhibit 66 to my prepared statement, a proposal for solid state system made by our company.

Another common practice used in Bell's proposals is to question the financial strength of the interconnect supplier by using a brochure entitled "Plain Talk About Communication Proposals and How To Compare Them."

From here, the Bell salesman produces a recent Dun & Bradstreet report on the interconnect supplier and supplements the report with rumors he has recently heard.

Financial comparisons in proposals are presented by Michigan Bell Telephone Co. with the aid of a computer printout as shown on exhibit 69 to my prepared statement.

As we are not financially able to utilize a computer ourselves we find ourselves in a position of trying to show a customer basic assumptions, such as a 7-year lifespan on our equipment. Yet the customer is awed by the massive printout and assumes the computer cannot be wrong.

Michigan Bell Telephone Co. insists that leasing of their equipment versus ownership of ours is always economically advantageous even though their own practice, as shown on exhibit 70 to my prepared statement, is to own capital assets whenever possible.

When the computer shows the private system to be only a few dollars more and the customer indicates he is going to buy, Bell resorts to other means such as stating an area is going to be measured service and the extra income will reduce the equipment billing, as shown on exhibit 68 to my prepared statement.

In the case of nonprofit institutions such as Calvin College, Albion College, and others, a threat of no further grants is made. In one instance, the Battle Creek, Mich., "Y." Bell actually asked for their grant back after the customer bought our system.

[For further information concerning the Battle Creek, Mich., "Y" mentioned above, see exhibit 10 at the end of Mr. Fox's oral testimony.]

Mr. Fox. Another financial tactic used is the enforcement of contract termination charges in a discriminatory manner. As the Bell salesmen were measured on net revenue increase prior to 1970, many customers were oversold.

In one such case, MANSCO Supply Co., Grand Rapids, the customer was told if he bought interconnect a termination charge would apply.

However, if he took the system from Bell they would drop the termination charge. The savings by changing without a termination charge was over \$250 per month, so he took Bell's offer. Thus, Michigan Bell, by tendering a "special deal" for a particular customer, was able to effectively stifle competition.

Functional systems, designed to each individual customer's needs and generally providing features not available from Bell, are one of the main benefits of interconnection. Bell counters this in their proposals by stating the features are not of value if they do not have them, as shown in exhibit 66 to my prepared statement.

In this same area, Bell frequently touts new services, real or merely some salesmen's fantasy, to keep a customer from accepting our system, as shown on exhibit 72 of my prepared statement.

Gaining approval as a Bell salesman for a "special assembly" was virtually impossible prior to interconnect. Following interconnect tariff approval in 1970 the entire procedure for gaining "special assembly" quotations was revamped in order to shut out competition.

Further, many special assemblies were offered at standard tariff rates when a customer insisted he needed a feature proposed by a competitor. A good example of this was the building of a busy lamp display in a speaker phone housing similar to a unit offered by Stromberg-Carlson, but only charging the customer the rate for individual busy lamps.

To assemble a competitive proposal, it is necessary that we first obtain information regarding a prospective customer, such as the service billing record, in order to properly analyze and advise the customer of his communications needs and to present a proposal which we feel will best meet these needs.

This information can only be obtained from Michigan Bell. Generally a customer is not aware of the existence of the service billing record, nor is he equipped to decipher it, and therefore few customer requests are made. It was standard practice at Michigan Bell for the commercial supervisor to contact the sales manager whenever such a request was made.

In turn, a salesman would immediately visit the customer, generally taking the service billing record with him under the guise of providing explanation and assistance. If it was a competitive case the competition specialists were called in.

Any customer request for interface information resulted in the same reaction. If our company is authorized by a customer to obtain the information for him we must get the material through the sales department, which is our competitor. What this has meant is that we are forced to supply our major competitor, either directly or indirectly, with all of our sales leads.

In a few cases where information is not requested from Michigan Bell they often learn of the proposal and react in the same manner. Michigan Bell has indoctrinated their 31,000 employees as to the competitive threat of interconnect; exhibit 64 to my prepared statement.

Whenever an installer, repairman, or other employee learns a customer is considering interconnect, a form is submitted or a call to a competitive hotline is made.

Again, a salesman is immediately dispatched.

As further evidence of what I believe represents a concerted effort on the part of A.T. & T. and the Bell System to eliminate competition by interconnect companies such as ours I would refer to a lawsuit brought against my company in January 1974 by Indiana Bell Telephone Co.

The lawsuit arose out of a sale by us of a telephone system to the Riverview Hospital in Noblesville, Ind., in 1973, and claims damages in excess of \$350,000 for the alleged intentional and deliberate interference by my company of contract rights of Indiana Bell, presumably on the basis of an alleged binding oral contract it claims to have entered into with the hospital in 1971.

Not only were my company and those of us actively involved in selling the telephone system to the hospital completely unaware of the existence of such an alleged oral contract, our entire involvement in this matter and the eventual contract obtained by my company resulted solely from our response to a public newspaper advertisement placed by the hospital for sealed bids on a new telephone system.

Further, Indiana Bell is now telling our potential customers that our company operates in an illegal manner and that they have filed a lawsuit against us asking for damages that exceed our net worth. The impact of this tactic is, of course, loss of sales.

The Bell System itself engages in the type of activity we have been wrongfully accused of in the Indiana case. Although there have been numerous incidents of the telephone company communicating with our clients after we have obtained a signed contract, for the sole purpose of trying to convince these customers to break their contracts and return to the Bell fold, there is one instance that stands out very vividly in my mind.

In this particular case, which involved two contracts approximating \$140,000 awarded to my company by Westdale Realty Co., Michigan Bell Telephone Co. contacted the customer after our contract was signed to advise them that the telephone company had recently filed an application with the Michigan Public Service Commission to restructure its rates, and as a result the rates to this customer would be lower than quoted to the customer at the time of the competitive bids submitted by my company and the telephone company.

Naturally the customer was interested in the prospect of lower rates from the telephone company, but advised Michigan Bell representative that it was already under contract to our company.

This, however, did not concern the Michigan Bell representative who the next day brought to this customer a form request prepared by Michigan Bell inviting the telephone company back in to make another proposal.

As a result of this deliberate effort on behalf of Michigan Bell my company lost this \$140,000 contract. Later, an ex-Bell employee involved in the matter stated that "they had done this to see how far they could push us before we filed suit."

This contract was part of a similar program instituted by Michigan Bell after its rate restructure case was filed to contact all customers in a competitive situation to advise them of the potential decrease in their rates which would result from the newly filed rate case with the hopeful, and I must add successful, effect of drying up sales and customer termination of contracts with interconnect companies.

Further harassment and threats of loss of business have been made to our prospective customers by utilizing lists of suppliers of goods and services and the amounts of money spent in various cities and towns in Michigan; exhibit 78 to my prepared statement.

This is, in my opinion, a flagrant violation of the laws governing a public utility. While not all firms purchase from A.T. & T. or the Bell System, the 31,000 Michigan Bell Telephone Co. employees do in fact purchase goods from area businesses. This fact in itself illustrates the tremendous purchasing power which can be, and has been, turned against interconnect customers.

For example, Michigan Bell Telephone Co. management and hourly personnel have been encouraged to "boycott" firms with private systems such as Orson E. Coe Pontiac, and Vandenberg Buick in the western Michigan area.

The existence of such a boycott is then brought to the attention of the respective companies by management employees of Michigan Bell who state that not Michigan Bell employee will be purchasing products from such companies, in an effort to discourage our customers from recommending interconnect.

During my employment with Michigan Bell Telephone Co., several employees who resigned to take advantage of opportunities offered in the interconnect industry were labeled "not for rehire," a notation that could be interpreted in many negative ways by a potential employer should Bell succeed in eliminating interconnection and thus causing our personnel to seek new jobs.

Even if a competitor succeeds in overcoming the above anticompetitive practices of Bell and consummates a sale his problems are far from over.

Upon receipt of a letter from a customer advising Bell of the decision to buy a competitor's system, Bell often attempts to "unhook" by using a variety of methods, such as rate changes, new product information, or threatening loss of business.

For example, our company made a sale to VanEss Construction Co., Grand Rapids, Mich., some 2 years ago. The VanEss firm did much of the underground construction work in western Michigan for Michigan Bell.

Upon learning of the customer's decision to interconnect the Bell employee responsible for issuing purchase orders for construction work called the customer and advised such customer that it would not be receiving any further Michigan Bell contracts.

In an effort to remove the customer from the "middle" of a clear-cut legal suit, and to prevent other potential customers from finding out about Bell's vindictive practices, we allowed the customer to terminate his contract with us.

Often due to a building's construction it is to the interconnect supplier's and customer's advantage to purchase Michigan Bell cable

already in place. However, Bell apparently is not interested in selling such cable—as shown in exhibits 37 and 79 to my prepared statement—as repeatedly shown by their actions and policies.

For example, a charge is levied by Michigan Bell to inventory such cable and quote a sales price even though other Bell companies do not levy such a charge. This process is not only costly but results in delays of 60 days or more.

The net result as pointed out in the Calvin College case is generally a sale price much higher than the cost for new cable. Of some 400 installations in Michigan, we have purchased Bell cable facilities in less than 5 percent of the cases, due to Bell's practices, causing abandonment of thousands of dollars of material to the expense and detriment of the ratepaying public.

Further expense is incurred by our company and by the customer through Bell's practice of cutting their abandoned cable off flush with the customer's conduit, generally rendering the conduit useless.

When leased cable facilities are requested from Bell, dates quoted for delivery for the Bell proposal suddenly change; as indicated in exhibit 81 to my prepared statement.

Other Bell-caused problems associated with private system cut over include delays in provision of service, no intercept on disconnected lines, faulty interface equipment, no information listing on new service, and so forth. We experience a Bell-caused problem on at least 80 percent of our cut overs. A representative 30-day summary is attached in exhibit 82 to my prepared statement.

To summarize, I would like to point out the facts described herein are not isolated examples, but brief insights into the every-day actions of the Bell System to eliminate competition. My statement is not unique. The same, and much more I am sure, could be provided by any of my counterparts in the interconnect industry.

I would again like to reiterate that there is a real present danger that competition will become extinct if the Bell System is allowed to continue using the interface, the regulatory process, and other anticompetitive practices to its competitive advantage. Although I am aware that the Bell System would respond by claiming that it has a right to engage in fair competition—and indeed, I support them in this regard—I have grave concerns about their definition of fairness.

Obviously it is not fair from my point of view to allow a giant monopoly to use its monopolistic position, as A.T. & T. and its many Bell subsidiaries are doing, to eliminate competition in a society that prides itself on the concepts of free enterprise and open competition for all.

Senator HART. Thank you for a statement which represents great detail. It will be the source of much comment as this hearing proceeds, I am sure.

I confess that maybe one of the most unimportant features of the body of testimony you gave us is the one that caused me to make my first note as you went along. Indeed, I made only one other note.

That is where you testify that charitable contributions appear, to you, to have been used to influence the placing of business. Now, that is not an entirely new concept, and it is why charity is defined in many ways; but this one seemed to go pretty far.

In one instance, a Battle Creek, Mich., "Y" actually was asked to return their grant after using your system. Are you sure of that?

Mr. Fox. Yes, sir; I am.

Senator HART. The reason I made the note was it struck me that even an alley-shop operation, operated by a real skinflint, would hardly undertake to do. If he guessed wrong, he would hardly go to the donee and say, "Well, you are getting your salmon from another fishhouse so give me back my gift."

Are you sure of that?

Mr. Fox. Yes. That information was passed on to us by a member of the board of directors of the Battle Creek "Y," who subsequently bought a system from us for his business.

Senator HART. I am sure there are vastly more important aspects to your testimony, but this one goes to a high level in my memory bank.

The other note I made was when you described the waiver—if that is the way you put it—of the termination charge. Another tactic in enforcement of contract termination charges, an instance of a Grand Rapids firm that you mentioned, the person was told if he brought interconnect, termination charges applied; however, if he bought the system from Bell they dropped the charge, thus saving him over \$250 a month. So he took Bell's offer. Thus Michigan Bell by tendering a special deal for a particular customer was able to effectively stifle competition; yet Michigan Bell states that it is at a disadvantage in competing against interconnect companies because it, as a common carrier, must charge the same to all its customers. "There were numerous instances like this—while I was employed by Michigan Bell—there continues to be at this date." Have you brought this to the attention of the public service commission?

My first question, I suppose, is, is this a tariff obligation; or in fact is a Bell company prohibited from charging for disconnect from one but waiving it from another?

Mr. Fox. Yes; they are.

Senator HART. Have you brought instances like this to the attention of the public service commission?

Mr. Fox. We have brought some of the material that I spoke of today to the attention of the public service commission. It is difficult for us, with our limited resources and time, to pursue all of the problems that we have experienced. I cannot recall at this moment whether or not this particular case was brought to the attention of the public service commission.

Senator HART. Counsel, it is your opinion it is a violation?

Mr. BORGHESE. Let me say this: As a common carrier whose practice is principally before the Federal Communications Commission, it is very common for tariffs, at the State and Federal level, to specify termination charges, prorating costs over usually a 5-year period for PBX equipment.

I work on the assumption that such a provision was in the Michigan tariff. I don't know that for a fact, but it can be checked. I would say there would have to be specific language allowing some sort of change from one form to another for that equipment. I doubt such language exists. If it did, I would say there was a substantial legal question about its legality.

The fact that language is in a tariff doesn't make it lawful. It is still subject to challenge and to be adjudicated by a regulatory body itself.

Senator HART. Mr. Hellerman?

Mr. HELLERMAN. Thank you, Mr. Chairman.

Mr. Fox, calling your attention to exhibit 78 in your prepared statement, could you describe that document?

Mr. Fox. This document is dated July 19, 1972. It is a memo from the division commercial manager of western Michigan to the district commercial managers outlining the Western Electric purchases within Michigan during 1971 with a list of the individual suppliers and amounts of money spent, and the cities and towns in that area:

"In addition to your use of this information, your marketing coordinate, you may find this helpful when recommending the sale of our [Bell] services in a competitive situation."

Mr. HELLERMAN. Attached to that is a computer printout listing many companies in the State of Michigan and the dollar sales?

Mr. Fox. Yes.

Mr. HELLERMAN. What inference do you draw from the fact that this document was provided to marketing people of Michigan Bell, at least in the Grand Rapids area?

Mr. Fox. In reviewing the document I see that those companies that we had competitive proposals in to were checkmarked. That would lead me to assume that it was used by the sales department in reminding the customer of how much business the Bell System had done with them.

Mr. HELLERMAN. Thinking back to your days at Michigan Bell could you think of any other reason this document could have been circulated to marketing people?

Mr. Fox. In my experience with Michigan Bell—while working there—I was never given a document such as this or told of its existence.

Mr. HELLERMAN. Thank you, Mr. Fox.

Your testimony covers many different activities involving Michigan Bell Telephone and how that company attempts to thwart competition.

I would like to ask you a series of questions so the record will be clear as to those activities which were engaged in while you were employed by Michigan Bell in their attempt to prevent a subscriber from obtaining his own telephone equipment.

When a request was received for billing or service information did you use that request as a lead, then contact the customer?

Mr. Fox. Yes; we did.

Mr. HELLERMAN. Did you delay providing the necessary information to customers interested in acquiring their own equipment as a strategy?

Mr. Fox. Yes, we did; under the reasoning that it was not a billable service and therefore got low priority.

Mr. HELLERMAN. If you knew that a wrong interface was ordered did you inform the customer immediately?

Mr. Fox. No, we did not. At that time it was the policy of Michigan Bell for the supplier to designate the interface unit that he

desired. We were in no way to make recommendations as to the suitability for the purposes.

Mr. HELLERMAN. Were delays of several months common in providing interface equipment?

Mr. Fox. Yes; they were.

Mr. HELLERMAN. I would like to introduce into the record at this point a letter from Elgin Electronics, Inc., dated May 17, 1974, from the president, E. S. Willis, which states, in part, in connection with delivery schedules of Western Electric for Elgin couplers:

Upon instructions to ship from either Western Electric or one of our independent telephone customers, shipment is made from stock in a matter of 1 or 2 days.

Senator HART. It will be received.

[See exhibit 2 at the end of Mr. Fox's oral testimony.]

Mr. HELLERMAN. Mr. Fox, did you suggest to customers acquiring their own equipment that the company they were considering doing business with was in a shaky financial situation? In other words, that they might not be around much longer?

Mr. Fox. We used Dun & Bradstreet in recommending that to the customer.

Mr. HELLERMAN. Was your superior aware of these tactics being used in an attempt to stop interconnection?

Mr. Fox. Yes, he was.

Mr. HELLERMAN. Were you told not to engage in these activities?

Mr. Fox. No.

Mr. HELLERMAN. Did you ever get advice from the Michigan Bell division manager on how to handle interconnect companies?

Mr. Fox. Yes; I did.

Mr. HELLERMAN. What did he suggest? Do you recall his words? Would you care to use them?

Mr. Fox. I don't care to use them.

Mr. HELLERMAN. Paraphrase them.

Mr. Fox. Well, in effect, he said, "Let them have it every chance you can."

Mr. HELLERMAN. How many salesman were under your supervision at Michigan Bell?

Mr. Fox. Eight.

Mr. HELLERMAN. Were they using the same sort of tactics?

Mr. Fox. Yes; they were.

Mr. HELLERMAN. It is my understanding you were involved in writing a handbook to train salesmen and for that reason you went to A.T. & T.'s headquarters in New York; is that correct?

Mr. Fox. Yes.

Mr. HELLERMAN. While you were there did you have contact with personnel from other Bell operating companies involved in marketing?

Mr. Fox. Yes; I did.

Mr. HELLERMAN. In talking with them was it your impression that what was going on in Michigan Bell was unique, or were these tactics being used throughout the Bell System?

Mr. Fox. It was my impression from discussions on that trip, and the subsequent phone calls with my counterparts around the

country, that each operating company was attempting to thwart competition, but seemed to be experimenting with different means of doing so.

So, in answer to your question: Some of the other companies were in fact following these practices; other operating companies had come up with their own practices.

Mr. HELLERMAN. Which company in your opinion was fighting interconnect the hardest?

Mr. Fox. At the time it appeared to be Illinois Bell.

Mr. HELLERMAN. Mr. Chairman, I would like to introduce into the record at this point an extract from the Customer Products Council meeting of A.T. & T., June 20, 1972, which identifies a Mr. Reuss, R-e-u-s-s, commenting that Illinois Bell Telephone has a "win 'em all" policy.

Senator HART. It will be received.

[For the excerpts referred to, see exhibit 7 at the end of Mr. Fox's oral testimony.]

Mr. HELLERMAN. Could you explain the job of a Bell Telephone consultant? What is his main purpose—as you saw it in the competitive case?

Mr. Fox. In a competitive case his primary objective was to retain the service the customer had and keep the sale, win the sale.

Mr. HELLERMAN. In a noncompetitive case?

Mr. Fox. In a noncompetitive case, prior to interconnect, his objective was to realize a certain revenue increase.

Mr. HELLERMAN. In other words it was to increase the monthly bill?

Mr. Fox. Yes.

Mr. HELLERMAN. How was their performance judged?

Mr. Fox. Prior to interconnect tariff of Michigan, it was judged on his net revenue increase; and the number of closes. After interconnect it was based on the number of wins versus the number of losses to interconnect.

Mr. HELLERMAN. When you were at Michigan Bell did you use termination charges and installation charges as strategies to lock in your subscriber?

Mr. Fox. Well, certainly if we were able to put a customer under a 5-year contract we did not have to worry about them going interconnect.

Mr. HELLERMAN. Did you ever waive installation fees to induce a customer not to go to interconnect?

Mr. Fox. I was involved in one case.

Mr. HELLERMAN. Was information passed to different departments within Michigan Bell so that the personnel would be aware of who bought their own telephone system?

Mr. Fox. Yes.

Mr. HELLERMAN. What was the purpose of that, in your opinion?

Mr. Fox. Well, on the surface, the reason for the interdepartment correspondence was to advise other personnel within the company that this customer must be handled in a different manner.

For example: On the repair requests the customer was to be advised before the repairman was dispatched; and if the trouble was

found to be in private equipment there would be a maintenance charge levied to him.

Mr. HELLERMAN. Would you briefly describe unhooking?

Mr. Fox. That is the practice of the telephone company contacting a customer who has notified them that he has a valid contract with an interconnect company, and encouraging the customer to breach that contract.

Mr. HELLERMAN. Was this strategy used while you were at Michigan Bell?

Mr. Fox. No; it was not.

Mr. HELLERMAN. Since you have been outside of Michigan Bell are you aware of cases where it has taken place?

Mr. Fox. Yes.

Senator HART. With your customers?

Mr. Fox. Yes.

Mr. HELLERMAN. Did customers considering going interconnect get quicker service than those who had indicated no interest of going interconnect?

Mr. Fox. Most definitely.

Mr. HELLERMAN. Would you look at your compilation of exhibits? Would you comment on 77-A in your prepared statement.

Mr. Fox. Exhibit 77-A is a directive from the district marketing manager to the local sales manager concerning a customer contact program relating to the pending Michigan Bell rate restructuring case, 1973, that I had discussed; and in it, it states that in establishing priorities on PBX accounts—that is, for contacting the customer to advise them that the rate may go down—the following criteria were suggested:

No. 1 was pending competitive cases.

2. Accounts under 60 stations that would be repriced automatically as a new class of PBX service at a greater rate.

It made mention of another particular line of PBX that would be going up; contact those vulnerable lines of business in key leader accounts.

Mr. HELLERMAN. I am particularly interested in the statement where it says:

This form should be used to establish priorities in PBX accounts that must be repriced prior to a customer contract.

That is in the third full paragraph.

Mr. Fox. Yes.

Mr. HELLERMAN. What does that mean?

Mr. Fox. I would have to merely give my opinion on it. I was not involved in the matter.

Based on my knowledge of Bell System, and their practices, I would think that a list of PBX customers had to be submitted to someone, either in accounting or in the commercial department, to have them reprice to reflect what the rate would be that they were paying if the proposed rate case was approved by the Michigan Public Service Commission.

Mr. HELLERMAN. Thank you.

Mr. CHUMBRIS. Before leaving that, Mr. Hellerman, what was the gentleman's name who signed that?

Mr. Fox. Mr. Gietzen.

Mr. CHUMBRIS. What is his capacity?

Mr. Fox. When I was at Michigan Bell he was a district marketing manager.

Mr. HELLERMAN. Were Michigan Bell employees encouraged to join organizations; in other words, become affiliated with companies?

Mr. Fox. Oh, yes.

Mr. HELLERMAN. How was that encouraged?

Mr. Fox. Well, there were many ways. For certain service organizations and other affiliations your membership dues were paid. You were given the time away from the job to participate in the organizations.

Mr. HELLERMAN. At this point in the record I would like to have placed a printout of other corporate affiliations of the Bell officers and directors of the major Bell telephone companies; and secondly, the affiliations of Bell personnel on Government boards.

Senator HART. They will be received.

[See exhibit 11 at the end of Mr. Fox's oral testimony.]

Mr. HELLERMAN. Did you work on the Calvin College case when you were at Michigan Bell?

Mr. Fox. Yes.

Mr. HELLERMAN. You worked on it from the other side when you left Michigan Bell?

Mr. Fox. Yes.

Mr. HELLERMAN. Was it unusual when you were at Michigan Bell to install equipment which had been removed from one location and install it at another location without that equipment being serviced?

Mr. Fox. I think it would be difficult in performing the judgment of whether it was usual or unusual based on the fact that as a marketing representative I didn't have access to whether the equipment was new or used, that type of information. However, it was done.

Mr. HELLERMAN. Was there an inventory list sent around to inform you of used equipment?

Mr. Fox. Yes.

Mr. HELLERMAN. Mr. Chairman, I would like to introduce into the record at this point a series of documents, but rather than take the time to identify them I will provide them to minority counsel.

Mr. CHUMBRIS. Have these documents already been submitted to us?

Mr. HELLERMAN. Some have been previously submitted.

Senator HART. They will be received subject to review by the staff.

Mr. CHUMBRIS. They will be made available?

Senator HART. Yes.

[See exhibits 2-9 at the end of Mr. Fox's oral testimony.]

Mr. HELLERMAN. No further questions, Mr. Chairman.

Mr. CHUMBRIS. Mr. Chairman, I have a question to ask of the witness. The main question I had I have already taken up with the previous witness.

As I have stated earlier, both Mr. Hellerman and I have visited many people. He has seen people I haven't seen. I imagine I have

seen people he hasn't seen in the industry, trying to find out as much background as to what goes on. I know that in inquiring of some of the people at A.T. & T., I specifically raised the question with them about the type of things that you are referring to; the type of things that we referred to in the previous hearing last week. And what they told me was A.T. & T. has a policy which was submitted as testimony last week that it is against the company policy to do the things that are being alleged.

The record will have to show whether some person down the line, even though he may be near the top of some operating company, or he may be near the top of a Bell Laboratory systems, or Western Electric, or even in the A.T. & T. itself, somebody may have done something against company policy.

It would be great if people didn't violate company policy, just like it would be great if Government employees and Government officials didn't violate the policy of this country.

Somewhere along the line you are going to find violations of policy. I believe witnesses will come in and explain—if they can explain—some of the things you have raised here today. Consistent with that, Mr. Chairman, I have three additional policy statements relating to the other three witnesses. I put one in the record when we met last Thursday. I would like to have these three inserted into the record.

Senator HART. They will be received.

Mr. CHUMBRIS. I have nothing further, Mr. Chairman.

Senator HART. I express again the committee's appreciation for the thoroughness of your presentation. We will await the responses from those who explicitly or by implication have been criticized.

Mr. Chumbris is right: Enunciating a company policy doesn't assure it adherence. In establishing regulations for Government employees even at the highest level, it doesn't assure adherence.

The role of Congress in attempting to run oversight on what goes on in Government is a little different than running oversight on what goes on in business. It is understandable that some people in business simply don't understand why the committee in Congress would go in and try to find out if their company policy is being adhered to.

I think most people would agree that our inquiry is appropriate and it may have some beneficial effects.

We will adjourn to resume at 2 o'clock in room 3302 in the Dirksen Senate Office Building.

[Whereupon, at 12:35 p.m., the hearing was recessed, to reconvene at 2 p.m., this same day.]

[The following was received for the record. Testimony resumes on p. 3503.]

MATERIAL RELATING TO THE TESTIMONY OF RONALD B. FOX

Exhibit 1.—*Prepared Statement of Mr. Fox*

PREPARED STATEMENT OF RONALD B. FOX, VICE PRESIDENT, MARKETING, TPI, INC.,
GRAND RAPIDS, MICH.

I. PERSONAL BACKGROUND

My name is Ronald B. Fox. I am Vice President of Marketing of TPI incorporated, a retail distributor of telephone equipment and systems to business telephone customers. Our company is headquartered in Grand Rapids, Mich-

igan, and is a distributor for telephone equipment manufactured and supplied by Stromberg-Carlson Corporation. We presently have some 100 employees in seven offices throughout Michigan and Indiana serving over 500 interconnect customers. Our company was one of the original six founding members of NATA (North American Telephone Association) and MICA (Michigan Independent Communications Association), associations dedicated to maintaining and improving the high standards of telephone service throughout Michigan and the United States.

From July, 1966 to February 1971, I was employed by Michigan Bell Telephone Company in various management capacities, initially, as a Communications Consultant. During the period from June, 1968 through September, 1969, I was a Staff Supervisor, Detroit Marketing Headquarters, responsible for classroom sales training of new salesmen, improvement of instructional techniques, research on competitive equipment and rate structures, estimating the degree of competitive impact upon Michigan Bell Telephone Company, and participating in Sales Manager Review activities.

On September 1, 1969, I was assigned as Sales Manager, Grand Rapids—Grand Valley Districts, supervising eight salesmen, responsible for 151 major industrial and institutional accounts and approximately 3,000 medium market business accounts. In January, 1971, Michigan Bell Telephone Company divided their company into three operating areas and I was given the task of establishing a regional marketing staff providing sales, administrative and accounting guidelines and assistance for the Marketing Group in Western Michigan.

I resigned from Michigan Bell Telephone Company in February, 1971, after becoming disillusioned with the anti-competitive tactics being used daily and the prevailing atmosphere of paranoia relative to interconnection and interconnect suppliers.

It is the concerted effort on the part of AT&T and the Bell System to eliminate competition by interconnect companies such as ours that I wish to address in my statement. I do so because of my concern that unless Federal Legislation is passed to protect and preserve the interconnect industry, AT&T and the Bell System will once again assure its continued monopoly position in the telephone equipment industry, thereby eliminating the many benefits derived by the business community through competition.

Many of the comments, supporting documents and exhibits prior to February, 1971 were given to me or used by me in carrying out my general day-to-day managerial duties. Others were provided by other Michigan Bell Telephone Company employees who had them for similar reasons and later joined our industry. Due to the sensitive nature of the materials, they have been retained by our attorney and not used or referred to for any purpose until this date.

In my statement, I will follow a typical competitive case from initiation to present date demonstrating the underhanded tactics of Michigan Bell Telephone Company to thwart sales by interconnect companies and halt future competition. From there I will outline other anti-competitive practices and will elaborate on the use of the interface couplers and the regulatory process to eliminate competition.

II. COMPETITIVE CASE HISTORY

A typical competitive case is that of Calvin College, Grand Rapids, Michigan, a private four-year liberal arts institution associated with the Christian Reformed Church. As their administrative communications system was somewhat antiquated and students service, for all practical purposes, did not exist, they entered into an agreement with our company in 1969 for the study and evaluation of all aspects of their telephone communications equipment, procedures and cost. On numerous occasions prior to this, the College had requested Michigan Bell to provide Centrex Service but their request had been continually rejected because the level of return to Michigan Bell was inadequate. The following chronological commentary and attached exhibits represent only a small portion of the exchange between our company, Calvin College and Michigan Bell and shows the degree of effort necessary on our part to preserve the rights created by the *Carterfone* decision and subsequent regulatory action on the Federal and State levels.

10-9-69—Calvin College advised Michigan Bell that they had entered a consulting agreement with our company and requested Michigan Bell to provide

any information and services to which they would normally be entitled. (Exhibit 1.)

12-19-69—Calvin College requested Michigan Bell to provide the date that Bell Centrex I CO service could be provided for them and when interconnected Centrex Service would be available. (Exhibit 2.)

1-26-70—Michigan Bell replied to Calvin College that more information was required from the college to respond to their request for Bell-provided Centrex and that Centrex interconnect was not yet approved by the Michigan Public Service Commission. (Exhibit 3.)

2-6-70—Our company requested the Michigan Public Service Commission to provide the status of interconnection tariffs as related to Calvin College and other firms. (Exhibit 4.)

3-20-70—Our company requested Michigan Bell to provide the answer on our Centrex interconnection request and the availability of toll terminal service for student long distance calling.

3-23-70—Michigan Bell replied to our company stating that they would have an answer to Calvin's request for Centrex service by May 1, 1970 and an answer to our request for toll terminals by April 15, 1970. (Exhibit 5.)

3-24-70—Michigan Bell replied to Calvin College that the Michigan Public Service Commission had approved the interconnect tariffs on March 9, 1970 and that they could review these tariffs in the Michigan Bell public office. This statement was made knowing full well, however, that Centrex interconnection had not been approved, nor filed for. (Exhibit 6.)

5-8-70—Michigan Bell stated to our company that they would have an answer regarding the Bell-provided Centrex for Calvin College by 6-1-70. (Exhibit 7.)

6-1-70—Michigan Bell stated to our company that they would in fact provide toll terminals for student long distance calling. However, they reserved the right to decide whether or not such service could be provided on a non-billed basis as done for other users. They stated their determination would be based on the volume of usage, for which no history existed. (Exhibit 8.)

7-2-70—The General Marketing Manager of Michigan Bell wrote the Vice President of Operations of Michigan Bell regarding Centrex service for Calvin College stating that he felt that the quality of the customer's service was reasonably good, but that the customer was sold on the need for an improved system, namely Centrex. He also stated that if Michigan Bell did not provide Centrex, Calvin's alternatives were to (1) keep the present service (2) buy service from another supplier (3) install residence service in the dormitories. He then went on to state that he thought they would buy from another supplier. In order to provide the Centrex service requested by Calvin College, the Grand Rapids East Central Office would have to be modified. If this was done, service could be provided in August, 1972, otherwise, no scheduled addition was planned for that office until 1985 or 1990. It was further stated that the rate of return for the system would be far below their required level. He went on to state that Calvin had specifically requested the charges and installation interval for privately owned Centrex and stated that if Bell would not provide Centrex service, that Calvin would definitely explore the use of a privately owned Centrex system. Therefore, he recommended the approval for a Centrex I CO offering for Calvin. Further analysis of this proposed rate of return reveals that under the rate structure in effect at that time, a loss of 3.1% on their investment would occur at cut-over of a Centrex I CO System. Furthermore, if the rates proposed in the Michigan Bell rate case pending at the time were approved, there would be a loss of approximately 1.6% at cut-over. (Exhibit 9.)

7-6-70—Michigan Bell Telephone Company corresponded with our company stating that they still did not have an answer on the Bell-provided Centrex service for Calvin College. They would call our company by 7-8-70 to provide an answer. (Exhibit 10.)

7-10-70—Michigan Bell advised Calvin College that they would in fact provide Centrex 1 CO service with a target date of August, 1972. They did not, however, respond to the customer's request relating to interconnect rates for Centrex service. (Exhibit 11.)

8-3-70—Our company wrote Michigan Bell Telephone Company requesting the cost to purchase outright the existing cable facilities at Calvin College. (Exhibit 12.)

8-17-70—Michigan Bell Telephone Company wrote our company advising us that they had forwarded our request to higher management for availability of Centrex interconnect. Further our requests were being processed through appropriate groups in their company for the purchase and lease of Michigan Bell cable facilities. They went on to state that since considerable time, including field survey was necessary, it was estimated that a minimum of 60 days would be required to make a final determination. (Exhibit 13.)

8-25-70—Our company wrote Michigan Bell stating that we felt the minimum 60 day interval for cable quotations was unreasonable in view of the fact that they could order and install a large call director system in two weeks. Further we asked them what the maximum would be. We went on to state that we would be pleased to discuss our Centrex interconnect request with any of their representatives and had not been contacted as of that date. (Exhibit 14.)

9-8-70—Michigan Bell wrote our company stating that they felt the time table for Centrex interconnect would be mid-1971. They still did not provide rates. (Exhibit 15.)

9-30-70—Our company wrote to the Michigan Bell General Marketing Manager requesting his assistance in obtaining Centrex interconnect rates. (Exhibit 16.)

10-26-70—Michigan Bell wrote our company stating once again that they felt Centrex interconnect would be available by mid-1971 and identified out dialing by late 1971. Further, they stated they would provide toll terminals to customers utilizing private equipment, where facility conditions permitted and it was in the public interest for the completion of long distance calls. (Exhibit 17.)

12-14-70—Our company made a proposal to Calvin College for a privately owned Stromberg-Carlson Centrex system utilizing the AT&T suggested interface rates for Bell Operating Companies. (Exhibit 18.)

12-17-70—Michigan Bell advised our company with a carbon copy to Calvin College that in order to meet the requested date for Bell-provided Centrex of August, 1972, the contracts for such service had to be signed in the next few days. (Exhibit 19.)

1-29-71—Michigan Bell made a proposal to Calvin College for Centrex I CO service outlining the many advantages of their system versus the Stromberg-Carlson privately owned Centrex. (Exhibit 20.) It was intimated to the Vice President and Business Manager of Calvin College that selection of the private system would jeopardize any future grants from Michigan Bell.

2-1-71—Michigan Bell went back to Calvin College with a Centrex monthly cost analysis showing the difference between the Michigan Bell Centrex I and the Stromberg-Carlson privately owned Centrex utilizing interface rates that they felt they would ask for should they file a Centrex interconnect tariff. Further they advised Calvin College that if the college was in fact sold on the features of the Stromberg-Carlson system that they would buy such a system directly from Stromberg-Carlson and install it under the existing tariff rate. As of this date, none of our requests for rate information on privately owned and interconnected Centrex service had been answered by Michigan Bell. (Exhibit 21.)

6-1-72—Our company wrote the Director of Public Utilities, Department of Commerce, State of Michigan, requesting a clarification on whether or not business trunk rates or residential trunk rates would apply to a college dormitory system, because Calvin College and another college for which we had proposed a system were advised by Michigan Bell that they would have to pay the higher business trunk rate. Michigan Bell had also stated to these colleges that at such time that business trunks were converted to measured service they would, in fact, have to pay message unit charges. (Exhibit 22.)

6-2-72—Our company again wrote the Director of Public Utilities, Department of Commerce, State of Michigan appealing to the Public Service Commission to intervene on our behalf with Michigan Bell to obtain trunk and interface rates for customer owned Centrex systems, stating that without success, we had attempted many times since 1969 to obtain an estimate of these costs. Meanwhile, in an effort to discourage their customers from purchasing our equipment, Bell had given their customers varying costs in use against us. (Exhibit 23.)

6-19-72—Our company wrote Michigan Bell advising them that Calvin College had formally agreed to purchase their own Stromberg-Carlson telephone system. (Exhibit 24.)

6-30-72—Michigan Bell wrote our company advising us that they would provide trunks for the non-Bell system at Calvin College dormitory. However, these trunks would be business flat rate trunks and converted to measured service in October, 1973, contrary to Michigan Bell's own policy of charging the lower residential trunk rates to its college customers. (Exhibit 25.)

7-18-72—Michigan Bell Telephone Company finally responded to our request for a cable quotation for Calvin College. One dormitory's cable and terminals were itemized, with the current value of those facilities shown by Bell at \$1,695.42. At the same time, utilizing one of the largest sources of supply to the interconnect industry for cable and terminals, it was determined that the list price to purchase these facilities new, would be only \$246.38. (Exhibit 26.)

7-25-72—Michigan Bell wrote our company advising us that per their tariff No. 3 certain types of roll terminals are provided without charge (in the interest of efficient toll service for the public). Since the toll terminal that we had ordered for Calvin College, did not fall in this category in their opinion, they would provide them on a billed basis. (Exhibits 27 and 28.)

8-18-72—The Director of the Department of Commerce, State of Michigan, wrote our company stating that dormitory trunk rates should be at the lower residential tariff rate, regardless of whether Michigan Bell provided the station equipment or an outside supplier, such as our company, provided it. Further, they stated that Michigan Bell was currently studying the question of private Centrex interconnect but until the studies were completed and rate making data finalized, no rate quotes would be made. (Exhibit 29.)

10-26-72—Michigan Bell wrote our company stating that they still did not have an answer on the Calvin College Centrex interconnection rates but they did expect to have the rates during the week of October 30, 1972. (Exhibit 30.)

2-7-73—Our company filed a Complaint and Petition for Hearing with the Michigan Public Service Commission. In our Complaint, we stated that beginning in 1969 and since that time, we had sought to compete with Michigan Bell in selling Centrex telephone equipment and systems to customers in the public market place. One of our first prospective customers for Centrex was Calvin College. In connection with quoting that system's cost to the customer, we had requested a quotation from Michigan Bell for Centrex interconnection and in particular, for Centrex interface rates. That request was not and had not been met and we were unable to apprise this potential customer as well as others of the potential cost of interconnection.

In November of 1970, our company presented a proposal for a privately owned Centrex telephone system to Ferris State College of Big Rapids, Michigan. Again, our company asked Michigan Bell for a quotation of interconnection rates in connection with this proposal and was not and to date had not been given a rate quotation. In connection with the proposal to Ferris State College, we provided a quotation of estimated figures for interconnection based on a competitive proposal made by Michigan Bell to Calvin College. That competitive proposal detailed the interconnection rates which we believed, on the basis of the Calvin quotation by Michigan Bell, to be applicable to Ferris State College. Thereafter, Michigan Bell Telephone Company informed Ferris State College that the approximated interconnection rates were not available as quoted in our competitive bid, in fact, they were likely to be higher and refused again to provide a firm quotation of rates. Following the proposal to Ferris State College, Michigan Bell made a competitive proposal to the college again, estimating the interconnection rates both higher than our first competitive bid to Calvin College and higher than the rates estimated by our company in our proposal to Ferris State College.

In approximately April of 1971, we began preparation to present a proposal for a privately owned Centrex telephone system to St. Mary's Hospital of Grand Rapids, Michigan. Through 1971 and into 1972, discussions were had with St. Mary's and we did present a proposal which again, did estimate interconnection rates based upon the competitive proposal made by Michigan Bell at Ferris State College, where Michigan Bell had estimated the interconnect rates at a higher cost than previously estimated. Our company and St. Mary's Hospital were subsequently informed that the estimated rate based upon our prior competitive proposal would not be available and that when Michigan Bell filed for a tariff to establish Centrex interface and trunk rates they would be substantially higher than the estimates presented by our company.

Our company then informed St. Mary's Hospital of the change and was unable to conclude a contract with that potential customer following the change in cost estimated from the original proposal.

We went on to state in our complaint that Michigan Bell's actions in failing to apply for Centrex interface and trunk rates, refusing to quote suggested rates and changing their own estimates by always revising them upwards after we relied on their competitive quote estimates and their actions with respect to our quoted jobs by telling potential customers that our company cannot have rates previously estimated were deliberate and intentional attempts by Michigan Bell and their agents to protect and preserve the Centrex market from fair and open competition all to the damage of our company and to the public customers of the State of Michigan. As a consequence of our company's repeated protest, Michigan Bell agreed in 1972 to furnish us firm commitments as to required rates on the Calvin College Centrex, but since that time it has failed to do so and there continues to be an effective exclusion of competition in the Centrex market. (Exhibit 31.)

2-13-73—Michigan Bell wrote a letter to Calvin College requesting that they authorize Michigan Bell to deal with our company on all telephone matters. They later used this letter of authority to refuse to accept orders from Calvin College for day-to-day repair service, billing requests and so forth, claiming that the College must call our company and our company in turn must call Bell. (Exhibit 32.)

3-30-73—Michigan Bell wrote our company's attorney outlining their proposed charges applicable for the provision of privately owned Centrex service. They indicated that they would file for a tariff containing the outlined charges as soon as their work load permitted. Charges set forth did not allow for a customer to provide his own outgoing toll identification, as had been indicated in all competitive proposals made by Michigan Bell to that date. (Exhibit 33.)

4-27-73—Our company's attorney wrote Michigan Bell requesting them to provide a fixed rate break-out for out-going toll identification on a customer provided Centrex as all written and oral estimates to our company's prospective customers had been made in that manner, and our equipment had the ability to provide this service for the customer. Further, we agreed to drop our complaint on that count if the out-going toll identification was broken out of the rate and if in fact, a tariff would be filed during 1973 as committed to us by Michigan Bell in a previous meeting. (Exhibit 34.)

4-19-74—Our attorney wrote Michigan Bell stating that it had been over a year since he had first met to discuss Centrex interconnect rates. To date, no tariff application had been filed with the Michigan Public Service Commission in regard to Centrex interconnection. He went on to state that there could be no excuse for the over one year delay in doing what we were advised would be done during 1973. Further, the delay was particularly inexcusable when you considered that our company still had not obtained what it had been trying to obtain since 1969, namely tariff rates for interconnection of privately owned Centrex systems. He stated that to effectively compete in the Centrex area, our company and other interconnect companies must be able to rely on established tariff rates. We have not had these since 1969, despite all the promise given by the numerous employees of Michigan Bell, who from time-to-time had been involved in the matter. Furthermore we had never received a break-out rate for the long distance identification, which Michigan Bell indicated in its letter of May 24, 1973, would, in fact, be covered by the tariff application. (Exhibit 35.)

To summarize, this case history represents the following anti-competitive activities directed against our company:

(1) Refusal for over four and one-half years to furnish reliable rates for the interconnection of a privately owned Centrex system.

(2) Offer to furnish a customer a telephone company provided Centrex system at a rate of return well below desired levels and below that provided by tariff and, indeed, at a rate below invested cost in order to prevent the customer from going "interconnect."

(3) Attempt to impose business rate trunking charges on privately owned telephone equipment users while at the same time charging the lower residential rate trunking charges to the telephone company's own customers.

(4) Attempt to charge privately owned telephone equipment users for toll terminals while not similarly charging the telephone company's own customers for toll terminals.

(5) Refusing to sell Bell cable facilities required for the interconnection of a privately owned telephone system for less than approximately 700% of the price at which new cable could be purchased from outside sources.

(6) Threatening a non-profit corporate customer with the withholding or withdrawal of charitable grants presently planned or to be made in the future in accordance with past practices.

(7) Offer by the Bell System to provide the same telephone equipment offered by the competitor at standard tariff rates but without the interface device.

Although these are the cost indicative of the practices encountered by us on the Calvin College project, they are in no way restrictive of the many, many other competitive tactics we run into on our day-to-day encounters with Michigan Bell. Some of these included numerous cases of harassment related to wrong directory listings, no transfer of calls from disconnected numbers, frequent out of service conditions on lines and interfaces and billing errors.

III. USE OF INTERFACE DEVICE AS AN ANTI-COMPETITIVE WEAPON

The ability of the Interconnect Industry to function also has been inhibited by the original successful effort of AT&T and the Bell System to obtain tariff requirements for the use of a protective connecting device, commonly known as an interface, in all instances of interconnection of privately-owned or leased telephone equipment to the message network. This requirement does not exist when a Bell company uses the same equipment for one of their installations even though the equipment, in some instances, was purchased from a foreign manufacturer or from the same supplier from whom we in the interconnect industry purchase our equipment.

In many areas, Michigan Bell Telephone Company will not install the interface until their system has been disconnected on the customer site. Further, this practice does not allow for standard telephone industry pre-cutover test procedures. When a faulty interface is installed, or when it subsequently malfunctions, the customer often must do without the line serviced by that device for a long period of time as there generally are no spare maintenance parts in the area Bell offices, thus causing impairment of customer services until the problem can be corrected.

The interface is widely used as an anti-competitive weapon by the Bell System. Initially, interfaces would not permit touch tone calling or data signals to be transmitted. This restriction was capitalized on by Bell salesmen at the direction of upper management as shown in Exhibit 36. Further, it was not until mid 1974 that the Bell Companies offered an interface that functioned via the standard telephone industry two-wire circuitry thereby causing the interconnect supplier additional expense, numerous repair problems, and in many cases actually precluded the sale of certain equipment, as shown in Exhibit 36. Furthermore, we are completely excluded from some areas because of the price prohibitions imposed by the interface. For example, the interface rate alone in the telephone answering field exceeds the total monthly cost of the equipment associated with it because of the requirement that an interface be used on every answering service customer's line.

Bell salesmen are instructed to impress upon the customer that interface devices "are a real cost that he must consider" and "that most non-Bell PBX's are manufactured to work with interface devices and will not work without them unless expensive modification of the equipment is undertaken" when in reality most non-Bell PBX's would function better without the interfaces as they have for years in areas served by Bell. General Telephone Company, United Utilities, Continental Telephone, Right-of-Way Companies, Bell of Canada, and many others. This point is taught in the Bell competitive training courses as shown in Exhibit 37.

The tariff required interface devices on customer-provided telephone equipment makes it necessary for our company to rely on Michigan Bell's delivery and production schedules for such equipment as Michigan Bell and/or Western Electric is the source of supply. In making competitive proposals, Michigan Bell has deliberately refused to provide reasonable delivery schedules for interface units and has unfairly utilized its position as the sole source of supply for interfaces indicating, as a selling point to our potential customers, that the delivery schedule for its own telephone company-provided system is

better even though they control delivery schedules for both types of equipment. While most Bell-provided systems carry a one or two week delivery interval, those that have been associated with interface equipment are shown on the attached Exhibits 38, 39, 40, 41, 42, 43, 44, 45, 46 and 47.

Installing and maintaining the interfaces is another area where Bell uses anti-competitive tactics. Michigan Bell personnel have stated that the reason we experience installation and service problems on interface equipment is that no formal training program exists in the Bell System for interface equipment despite the tremendous number of units in service and the problems encountered. Further, on key system interfaces, Michigan Bell craft personnel do not have the proper tools or test equipment specified in the Bell System Practice, 463-340-101, starting with a special wrench to remove the cover, to a test set (KS 20721) for testing proper output of the unit. In an analysis of customer trouble reports from January 1972 through June 1972, it was found that over 95% of the problems were caused primarily by Michigan Bell's interface as shown on Exhibit 48. Beyond technical training, the personnel taking normal repair reports from customers lack the training and procedures for handling interface repair cases thus, adding days to a repair request even in out-of-service situations.

Added to the delays in repairing of interfaces is the practice of billing a maintenance of service fee to the customer by Michigan Bell even though the problem is ultimately determined to be theirs or "comes clear." Our company, in turn, must absorb the administrative and direct labor expenses associated with proving that the trouble is in the interface, which in our Detroit office alone, amounted to over 1800 hours this year.

Discrimination is often found in the design of interfaces. One example is on the most commonly used PBX interface, the CDH. On Bell provided PBX's, it makes no difference which side of a line the ringing signal is transmitted on. However, the CDH allows ringing signal on one side of the line only. Consequently, many customers experience complaints of callers ringing into their firm and receiving no answer.

The consumer is discriminated against because of the rate he pays for the interface device. As shown on Exhibit 48A, "the supplier or manufacturer must specify its connecting device to be used from those which are Bell System approved." We discovered that the STC or Bell System KS20721 interface is a universal interface device with certain optional features gained by either simple "strapping" of leads or attaching an optional circuit board to provide the protective requirements for 12 classes of interface as shown on Exhibit 49. The STC interface tariff rate is \$6.50 per month while the same interface with simple strapping performed, carries three different rates.

To give you an example of what I am referring to, in May, 1973, our company's attorney requested that Michigan Bell install an STC-RC interface device to replace the interface device they were then using. This interface device was a modification of the universal interface developed by the Bell System. However, with the modification, which basically involved the elimination of certain optional features, the interface was exactly the same in design as a similar tariffed interface device, the SU6AQ, for which a rate of \$3.75 was charged. However, Michigan Bell refused to provide the STCRC at the \$3.75 rate but instead insisted on a rate of \$6.50 per month.

Several months after the notice to Michigan Bell of the similarity in design of the STC-RC and the SU6AQ and, more than two years after the rate differential of \$3.75 vs. \$6.50 was established by the telephone company, a meeting was held in Detroit, Michigan on this matter. As a result of this meeting, Michigan Bell agreed that there was no basis for this rate difference and further agreed to amend the tariff application then pending with respect to rates for interface devices to eliminate the disparity in prices which it subsequently did by establishing a rate of \$4.75 for the universal interface. However, this admission by Michigan Bell did not, in any way, provide for a rebate to those customers who previously had been paying \$6.50 for an interface device that should not have cost more than \$3.75.

Our renewed hope for fairness and equality were unfortunately short-lived. Shortly after Michigan Bell filed an amendment to its interface application for the sole purpose of establishing the same rate for the SU6AQ and the STC-RC, the staff of the Public Service Commission for, we believe, the first time in the

history of the Michigan regulatory process rejected a Michigan Bell rate application on the grounds that the rates proposed were too low. As a result, Michigan Bell was compelled by the Commission Staff to file another amendatory application to further increase the anti-competitive rates for these interface devices, to \$5.10 which in the case of the SU6AQ and STC-RC resulted in a further increase of 10% in rates over the original rate proposal of \$4.75 as compared to the present tariff rate of \$3.75. The overall rate increase proposed on the basis of the Commission Staff's insistence now amounts to 36%.

I am attaching as Exhibits 50, 51 and 52 a series of letters which I believe will more than adequately demonstrate the problems confronting us in this area.

For over three years, the FCC has been considering the question of whether an interface device is really necessary to protect the telephone message network or whether there might not be a better alternative, such as a certification program similar to the UL certification program which would eliminate the costly requirement of the interface devices and associated problems. This is the only way that we could compete on an equal basis with the Bell System in most situations.

However, to date, no affirmative action has been implemented by the FCC which would eliminate this anti-competitive device although in some states, most notably New York and California, action has been taken by the State regulatory agencies to eliminate the anti-competitive effects of the interface.

IV. ATTEMPTED USE OF THE REGULATORY PROCESSES TO THWART COMPETITION

Unfortunately, the rulings and procedures of State regulatory agencies tend to perpetuate the monopoly position of the Bell System. The competitive tactic of Michigan Bell that we in the interconnect industry believe to be the most dangerous to our survival is the attempted use by it of the state regulatory process to provide legal justification, or, if you will, a protective umbrella, for their anti-competitive activities. By this statement I in no way mean to infer that the Michigan Public Service Commission is in favor of knowingly eliminating interconnect competition. I do not believe that this is their purpose, but yet the effect of the Commissions' approval of rate applications calling for a reduction in rates in areas in which interconnect competition is found is to render further comfort and support to Bell's goal of eliminating competition.

To provide some insight as to how, in my opinion, the Bell system is seeking to eliminate competition by regulatory fiat, I need only show what has taken place in the State of Michigan over the past two years.

On February 15, 1973, Michigan Bell Telephone Company filed a general rate application with the Michigan Public Service Commission asking for an overall rate increase of \$29.7 million. Its application was supported by 365 pages of testimony and 342 pages of exhibits of which 232 pages of testimony and 230 pages of exhibits were directly related to its request for approval to completely restructure its terminal equipment rate schedule. One of the avowed purposes for this radical restructuring of its rates was to meet the threat of competition from the interconnect companies. Attached to my testimony as Exhibit 53 are pages from the direct testimony of Mr. Kenneth Hamming attesting to this fact.

Before proceeding, I would like to point out that several months prior to the filing of this rate application, the State of Michigan enacted what is commonly referred to as the nine-month bill, which was instigated and strongly supported by the utility industry, including Michigan Bell. The Act basically required that the Public Service Commission render its decision on all rate applications within nine months from the date the application is filed, or file with the Governor of the state a report explaining the specific reasons why it was not able to meet the nine-month deadline. Unfortunately, for our interconnect association and others who intervened in this case, this bill was interpreted by the Hearing Examiner as imposing a mandate on the Commission to act within the nine-month period.

On February 23, 1973, the Commission issued its order for hearings on the application and gave all potential intervenors until March 20 to file their petitions to intervene in the case. Thus, we were given less than one month in which to analyze fully a rate application consisting of 462 pages of testimony and exhibits which were based on cost information and studies available, at that time, only to the telephone company and which, I know, was put together over a period of two years utilizing highly technical and complicated cost data fed into and out of Bell computers. Although our attorneys were able to

meet the March 20 deadline for filing our intervention petition, they were next confronted with preparing for the cross-examination of the Bell witnesses which started six days later on March 26.

In addition, the testimony of one of our key witnesses was excluded by the Hearing Examiner because it was not timely filed after it had been revised to meet certain objections of the Hearing Examiner at the time of its original filing. As a result, we were denied the right to present a witness and to introduce testimony we felt was very important to our case.

The effect of the nine-month bill and the time schedule resulting from it was to make it impossible for us or for any of the other intervenors in the case to efficiently and properly challenge the extremely complicated case presented by Michigan Bell. Indeed, the Staff of the Public Service Commission, who is looked to for technical advice and assistance by the Commission members in making their decision, admitted that they did not have adequate time or manpower to thoroughly investigate the facts and subjective judgments submitted by Michigan Bell. Thus, the staff had to rely to a substantial extent on the unchallenged factual assertions and data given to them by the Bell witnesses.

What did the 1973 Michigan Bell rate case do to the interconnect industry? Without going into extensive detail in this regard, the application of Michigan Bell to restructure its rates, which was accepted completely in concept, resulted in rate reductions to those Michigan businesses most vulnerable to competition and rate increases (in one instance by over 150%) to those businesses who either because of the anti-competitive effects of the interface device prices or for other reasons were not vulnerable to competition, i.e.; the captured market. I am attaching to my testimony as Exhibit 53A a graph submitted by our Michigan Interconnect Association in the 1973 rate case to show the competitive effects of the rates proposed by the telephone company where the price of the interface device is taken into consideration. Except for examples F, I and M which were selected by us as most representative of the type of key telephones sold by interconnect companies, all of the examples used in the exhibit were taken from an exhibit used by one of the Bell witnesses to show the effect of the rate proposal to various customers without consideration of the effect of the interface device.

Another example of how Michigan Bell used the 1973 general rate case to further its goal of eliminating competition was its proposal commonly referred to as the "90 day moratorium". Basically the proposal provided for a period of ninety days following the effective date of the new rates during which certain PBX business customers could change to a new telephone system at lower rates than charged for their old system but without having to pay the termination charge assessed by tariff against all customers who are under contract with the Michigan Bell and who terminate their contract prior to its normal expiration date. The major effect of this from the point of view of interconnect people was that all of the customers who Bell could convince to change out their service had to sign new five-year contracts which meant that each of these customers would be eliminated from the threat of competition for a period of five more years.

The end result of this anti-competitive proposal was that Michigan Bell was successful in signing up 102 Michigan customers to the new five-year contracts. However, not known by anyone at the time except Michigan Bell (but soon to be found out) was that these 102 customers, who are now locked into the Bell System and have nowhere else to turn for their equipment needs, were confronted less than one month after the expiration of the 90 day moratorium with a new general rate application (filed by Michigan Bell on April 23, four months after the decision was rendered in the 1973 rate case) requesting, among other things, an average rate increase of 16% to these customers. What could be more damning than to first eliminate the competition and then, sock the captured customer with an average 16% rate increase?

Finally, I am attaching as Exhibit 54, a portion of the transcript in the 1973 Michigan rate case containing remarks made by the Hearing Examiner, Mr. Sheridan, to the effect that he was concerned with the presence of the interconnect people in the case and had grave doubts whether the Commission should even be concerned with the competitive effects of Bell's proposed rate structure. What is so discouraging about this type of attitude is that if the Public Service Commissions around the country don't care what the Bell system does to inter-

connection, then who does care and who do we look to for protection against this Goliath? We obviously are not on an even competitive level with this giant who, by the mere fact that they monopolize the utility aspect of the telephone industry, monopolizes the telephone equipment industry.

V. OTHER ANTI-COMPETITIVE PRACTICES OF THE BELL SYSTEM

What are some of the anti-competitive practices utilized by Bell in Michigan?

With the advent of competition in 1970, the entire composition and policy of the Michigan Bell Marketing Department was changed. Massive employment and training programs were initiated for salesman. Clerical help was added to free the salesmen so that more accurate, detailed and professional proposals could be provided. Studies of the product line were conducted as shown in Exhibits 55, 56 and 56A and new products heretofore unavailable were provided either by Western Electric or purchased from other suppliers such as Nippon. The machinery to establish competitive changes in the pricing structures was implemented. Installation and maintenance intervals were shortened through inter-departmental agreements in various areas and billing, order accuracy, and other measurement were instituted, and a crash program to identify, qualify and contact potential interconnect customers was mounted. (Exhibits 57, 58 and 59.)

In-depth consulting was provided, in a manner never used before (Exhibit 60) to keep customers from retaining consultants who might recommend interconnection. Weekly and monthly status reports on consultant and supplier activities were submitted to upper management. (Exhibit 60A and 60B.) Salesmen and their managers were measured on the basis of "wins and losses" rather than increased revenue. Physical inventories of installed services on customers premises were begun and in many cases back charges dropped if there was a competitor involved as happened at Steelease, Inc., in Grand Rapids. Overtime funds became available for use on competitive proposals and market coverage programs, computerized WATS studies were introduced, ostensibly to demonstrate how a customer could trim his long distance costs thereby insuring customer loyalty even though in-house studies proved the customer's total billing increased by 17% ninety days following WATS installation due to increased usage. In short, it was a "new ball game" and the rule was—shut out the competition.

In 1972, Michigan Bell Telephone Company embarked on an extensive advertising and "P.R." program designed to halt interconnection at the direct and indirect expense of the consumer. The Michigan media was flooded with commercials against private equipment such as the radio spots shown in Exhibit 61. To deny the telephone company the right to engage in such a campaign would not put them at a competitive disadvantage since prospective interconnect customers must ask the telephone company for a copy of their service billing record on the basis of which a proposal by the private distributor is made. Once notified by the customer that he is considering a proposal from a private company, the telephone company always contacts the customer to make a competitive proposal per procedures established while I was employed by Michigan Bell. Use by a public monopoly of funds derived from the rate-paying public, including interconnect suppliers, to advertise in direct competition with private industry is completely unfair.

An "educational campaign" was launched by Michigan Bell stating that the result of interconnect would be an increase in the price of phone service to most of Bell's customers because the company will have to charge more to make up for the lost revenue (Exhibit 62)—an entirely unfounded position. The same theme is carried out in Michigan Bell's house publications, Exhibits 63 and 64.

Michigan Bell Telephone Company frequently used and continues to use half-truths in presenting their proposals. A typical example is the misuse of their "General Maintenance Curve". The chart related to crossbar (electro-mechanical) PBX's in use during the late 1950's. It has no bearing on modern Crossbar equipment or in particular, solid state systems as stated in the Bell competitive training manual (Exhibit 65.) Yet, Bell salesmen and managers use this chart daily to convince prospective customers that their maintenance costs on solid state and modern crossbar systems meet or exceed the AT&T findings as shown on Exhibit 66, a proposal for solid state system made by our company.

Another common practice used in Bell proposals is to question the financial strength of the interconnect supplier by using a brochure entitled "Plain Talk About Communication Proposals and How to Compare Them", (Exhibit 67). From here, the Bell salesman produces a recent Dunn and Bradstreet report on the interconnect supplier and supplements the report with rumors he has recently heard. In fact, this is the very tactic being used by Indiana Bell as pointed out later in my testimony. This practice was widely used while I was still employed by Michigan Bell, the effect of which is shown on Exhibit 68.

Financial comparisons in proposals are presented by Michigan Bell Telephone Company with the aid of a computer print-out as shown on Exhibit 69. As we are not financially able to utilize a computer ourselves, we find ourselves in a position of trying to show a customer where basic assumptions, such as seven year life span on our equipment, are not realistic when Michigan Bell Telephone Company uses 18 years as their basis for rate making purposes on the same equipment. Yet the customer is awed by the massive print-out and assumes the computer cannot be wrong. Michigan Bell Telephone Company insists that leasing of their equipment versus ownership of ours is always economically advantageous even though their own practice, as shown on Exhibit 70, is to own capital assets whenever possible.

When the computer shows the private system to be only a few dollars more and the customer indicates he is going to buy, Bell resorts to other means such as stating an area is going to measured service and the extra income will reduce the equipment billing as shown on Exhibit 68. In the case of non-profit institutions such as Calvin College, Albion College and others, a threat of no further grants is made. In one instance, the Battle Creek, Michigan "Y", Bell actually asked for their grant back after the customer bought our system.

Another financial tactic used is the enforcement of contract termination charges in a discriminatory manner. As the Bell salesmen were measured on net revenue increase prior to 1970, many customers were oversold. In one such case, MANSCO Supply Co., Grand Rapids, the customer was told if he bought interconnect, a termination charge would apply. However, if he took the system from Bell, they would drop the termination charge. The savings by changing without a termination charge was over \$250.00 per month, so he took Bell's offer. Thus, Michigan Bell by tendering a "special deal" for a particular customer was able to effectively stifle competition. Yet Michigan Bell states that it is at a disadvantage in competing against interconnect companies, because it, as a "common carrier", must charge the same to all its customers (Exhibit 71—taken from Michigan Bell's brief in the 1973 rate case.) There were numerous incidents like this and others while I was employed by Michigan Bell Telephone Company and continues to be at this date.

Functional systems, designed to each individual customer's needs and generally providing features not available from Bell, is one of the main benefits of interconnection. Bell counters this in their proposals by stating the features are not of value if they do not have them, as shown in Exhibit 66. If they cannot convince a customer on this point, they state they are going to offer the same services shortly at half the price of our proposal. The customer in Exhibit 68 held off his decision for two years on this tactic. When he finally realized Bell wasn't going to provide the feature and told Bell of his feelings, they resorted to other anti-competitive means as pointed out above. In this same area, Bell frequently touts new services, real or merely some salesman's fantasy, to keep a customer from accepting our system, as shown on Exhibit 72.

Gaining approval as a Bell salesman for a "special assembly" was virtually impossible prior to interconnect. Following interconnect tariff approval in 1970, the entire procedure for gaining "special assembly" quotations was revamped in order to shutout competition. Further, many "special assemblies" were offered at standard tariff rates when a customer insisted he needed a feature proposed by a competitor. A good example of this was the building of a busy lamp display in a speakerphone housing similar to a unit offered by Stromberg-Carlson but only charging the customer the rate for individual busy lamps.

Prior to 1970, sale of the features of toll diversion, or long distance restriction to a customer other than hotels—motels required a letter of explanation to upper management and a three year contract as it cut Bell's long distance revenue. Several sales of this nature, and a salesman was labeled non-profit

oriented and generally found himself at the bottom of the promotion list. This policy is indicated on Exhibit 73. As most good businessmen desire toll diversion to control long distance costs, interconnect proposals generally contain recommendations for the future. From mid-1970 on, other than continuing to require a contract, Bell freely marketed the service.

To assemble a competitive proposal, it is necessary that we first obtain certain information regarding a prospective customer, such as the Service Billing Record, in order to properly analyze and advise the customer of his communications needs and to present a proposal which we feel will best meet these needs. This information can only be obtained from Michigan Bell. Generally a customer is not aware of the existence of the Service Billing Record nor is he equipped to decipher it, and, therefore, few customer requests are made. It was standard practice at Michigan Bell for the Commercial Supervisor to contact the Sales Manager whenever such a request was made. In turn, a salesman would immediately visit the customer, generally taking the Service Billing Record with him under the guise of providing explanation and assistance, and, if it was a competitive case, the competition specialists were called in.

Any customer request for interface information resulted in the same reaction. The customer was forced to provide his name, telephone number, etc. which was entered on a form, (Exhibit 74) and a copy immediately given to the Sales Manager. This practice is not unique to Michigan Bell as shown on Exhibit 75, an excerpt from Southern Bell's training manual. If our company is authorized by a customer to obtain the information for him, we must get the material through the Sales Department, which is our competitor. What this has meant is that we are forced to supply our major competitor, either directly or indirectly, with all of our sales leads.

In a few cases where information is not requested from Michigan Bell, they often learn of the proposal and react in the same manner. Michigan Bell has indoctrinated their 31,000 employees as to the competitive threat of interconnect. Exhibit 64. Whenever an installer, repairman, or other employee learns a customer is considering interconnect, a form is submitted (Exhibit 76) or a call to a competitive hot-line is made. Again, a salesman is immediately dispatched. These employees are also used to discredit consultants (Exhibit 77). When the installer feels a change recommended by the consultant is not in the best interests of the customer, even though he may not be fully aware of the overall communication program, he is instructed to contact the Bell salesman. In turn, the salesman attempts to demonstrate to the customer that Bell consultants are professionals, would not recommend the charge and directly or indirectly encourages the customer to use Bell's services.

As further evidence of what I believe represents a concerted efforts on the part of AT&T and the Bell System to eliminate competition by interconnect companies such as ours, I would refer to a lawsuit brought against my company in January, 1974, by Indiana Bell Telephone Company. The lawsuit arose out of a sale by us of a telephone system to the Riverview Hospital in Noblesville, Indiana in 1973 and claims damages in excess of \$350,000 for the alleged intentional and deliberate interference by my company of contracts rights of Indiana Bell presumably on the basis on an alleged binding oral contract it claims to have entered into with the hospital in 1971. Not only were my company and those of us actively involved in selling the telephone system to the hospital completely unaware of the existence of such an alleged oral contract, our entire involvement in this matter and the eventual contract obtained by my company resulted solely from our response to a public newspaper advertisement placed by the hospital for sealed bids on a new telephone system. These facts could easily have been determined by Indiana Bell by even the most cursory investigation but instead, the Indiana Bell elected to involve us in a lawsuit, the expenses of which we can ill-afford if we are going to be able to devote our limited capital resources to competing with the Bell System and its vast unlimited capital resources. Further, Indiana Bell is now telling our potential customers that our company operates in an illegal manner, and that they have filed a lawsuit against us asking for damages that exceed our net worth. The impact of this tactic is, of course, loss of sales.

The Bell System itself engages in the type of activity we have been wrongfully accused of in the Indiana case. Although there have been numerous incidents

of the telephone company communicating with our clients after we have obtained a signed contract for the sole purpose of trying to convince these customers to break their contracts and return to the Bell fold, there is one instance that stands out very vividly in my mind. In this particular case, which involved two contracts approximating \$140,000 awarded to my company by Westdale Realty Company, Michigan Bell Telephone Company contacted the customer after our contract was signed to advise them that the telephone company had recently filed an application with the Michigan Public Service Commission to restructure its rates, and, as a result, the rates to this customer would be lower than quoted to the customer at the time of the competitive bids submitted by my company and the telephone company. Naturally the customer was interested in the prospect of lower rates from the telephone company but advised the Michigan Bell representative that it was already under contract to our company. This, however, did not concern the Michigan Bell representative, who the next brought to this customer a form request prepared by Michigan Bell, inviting the telephone company back in to make another proposal. As a result of this deliberate effort on behalf of Michigan Bell my company lost this \$140,000 contract. Later, an ex-Bell employee involved in the matter stated that "they had done this to see how far they could push us before we filed suit". This contract was part of a similar program instituted by Michigan Bell after its rate restructure case was filed to contact all customers in a competitive situation to advise them of the potential decrease in their rates which would result from the newly filed rate case with the hopeful, and I must add, successful effect of drying up sales and customer termination of contracts with interconnect companies, as shown in Exhibit 77A.

The irony of the two situations is that the Bell System is itself guilty of the same type of activity that it accuses our company of engaging in; but because of its vast financial resources, we find ourselves having to defend what we believe to be a completely spurious lawsuit, while being unable to pursue what we believe to be a very strong case against the Bell System. Somehow, it seems to me, justice is not being served when the extreme disparity in financial strength can play such an important roll in the pursuit of justice.

Further harassment and threats of loss of business have been made to our prospective customers by utilizing lists of suppliers of goods and services and the amounts of money spent in various cities and towns in Michigan. (Exhibit 79.) This is, in my opinion, a flagrant violation of the laws governing a public utility. While not all firms purchase from AT&T or the Bell System, the 31,000 Michigan Bell Telephone company employees do in fact, purchase goods from area businesses. This fact in itself illustrates the tremendous purchasing power which can be, and has been turned against interconnect customers. For example, Michigan Bell Telephone Company management and hourly personnel have been encouraged to "boycott" firms with private systems such as Orson E. Coe Pontiac, and Vandenberg Buick in the Western Michigan area. The existence of such a "boycott" is then brought to the attention of the respective companies by management employees of Michigan Bell who state that no Michigan Bell employee will be purchasing products from such companies, in an effort to discourage our customers from recommending interconnect that Michigan Bell condones such "boycotts" is illustrated by the fact that, in a management meeting in the winter of 1972-73, a Division Manager stated to low and middle management employees "it is only reasonable that our company and our employees do business with those firms that do business with Michigan Bell."

During my employment with Michigan Bell Telephone Company, several employees who resigned to take advantage of opportunities offered in the interconnect industry were labeled "not for rehire", a notation that could be interpreted in many negative ways by a potential employer should Bell succeed in eliminating interconnection and thus causing our personnel to seek new jobs.

Even if a competitor succeeds in overcoming the above anticompetitive practices of Bell and consummates a sale, his problems are far from over. Upon receipt of a letter from a customer advising Bell of the decision to buy a competitor's system, Bell often attempts to "unhook" by using a variety of methods such as rate changes, new product information, or threatening loss of business (if the customer provides goods or services to Bell). For example, our company made a sale to VanEss Construction Co., Grand Rapids, Michigan some two years ago. The VanEss firm did much of the underground construction work

in Western Michigan for Michigan Bell. Upon learning of the customers decision to interconnect, the Bell employee responsible for issuing purchase orders for construction work called the customer and advised such customer that it would not be receiving any further Michigan Bell contracts. In an effort to remove the customer from the "middle" of a clear cut legal suit, and to prevent other potential customers from finding out about Bell's vindictive practices, we allowed the customer to terminate his contract with us.

Often due to a building's construction, it is to the interconnect supplier's and customer's advantage to purchase Michigan Bell cable already in place. However, Bell apparently is not interested in selling such cable as shown in Exhibits 37 and 79 and as repeatedly shown by their action and policies. For an example, a charge is levied by Michigan Bell to inventory such cable and quote a sales price, even though other Bell companies do not levy such a charge (Exhibit 80.) This process is not only costly, but results in delays of 60 days or more. The net result as pointed out in the Calvin College case is generally a sale price much higher than the cost for new cable. Of some 400 installations in Michigan, we have purchased Bell cable facilities in less than five percent of the cases due to Bell's practices causing abandonment of thousands of dollars of material to the expense and detriment of the rate paying public. Further expense is incurred by our company and by the customer through Bell's practice of cutting their abandoned cable off flush with the customer's conduit, generally rendering the conduit useless.

When leased cable facilities are requested from Bell, dates quoted for delivery for the Bell proposal suddenly change as indicated in Exhibit 81. It may be alleged, for example, that circuits do not meet acceptable telephone industry standards for transmission. It is then up to us to prove compliance—virtually an impossible task as test equipment can be used only in the Bell Central Office. Further complication results by Bell's continuing changes in policies without notification. For example, we recently sold a private system to Wayne County Catholic Social Services, Detroit, Michigan that required eighteen leased circuits. Bell's policy had always been to terminate their leased circuits at the point designated by the customer. On the day before the system cut-over, Bell advised us that the above was no longer going to be their policy. Thus, the cut-over was delayed one week while we completely re-wired the building. To date, we have never received written confirmation of this policy change.

Other Bell-caused problems associated with private system cut-over include delays in provision of service, no intercept on disconnected lines, faulty interface equipment, no information listing on new service, and so forth. We experience a Bell-caused problem on at least 80 percent of our cut-over. A representative thirty day summary is attached in Exhibit 82.

"Scare tactics" are also employed to our competitive disadvantage. For example, a Bell engineer visited the Charles Strelinger Company, Warren, Michigan, prior to our system cut-over. While there he told the customer that on the night of cut-over for Bond-Bilt Construction (another of our customers), Michigan Bell installers worked without pay chopping up our cable, thus causing the customer to go without service for one and one-half days.

V. SUMMARY

To summarize, I would like to point out the facts described herein are not isolated examples, but brief insights into the everyday actions of the Bell System to eliminate competition. My statement is not unique. The same, and much more I am sure, could be provided by any of my counterparts in the interconnect industry.

I would again like to reiterate that there is a real present danger that competition will become extinct if the Bell System is allowed to continue using the interface, the regulatory process and other anti-competitive practices to its competitive advantage. Although I am aware that the Bell system would respond by claiming that it has a right to engage in fair competition (and indeed I support them in this regard), I have grave concerns about their definition of fairness. Obviously, it is not fair from my point of view to allow a giant monopoly to use its monopolistic position, as AT&T and its many Bell subsidiaries are doing, to eliminate competition in a society that prides itself on the concepts of free enterprise and open competition for all. To claim the right to lower rates in areas vulnerable to competition and at the same

time to claim an overall revenue deficiency of some thirty million dollars (as was done by Michigan Bell in the 1973 rate case) does not conform to my sense of fairness; particularly when no evidence was ever submitted by Michigan Bell to show any loss of profits resulting from competition. To engage in marketing tactics which I have described above and to devote the financial resources obviously devoted by the Bell System to its "competitive effort" cannot be considered as "fair" competition when viewed in the light of Bell's financial strength vis-a-vis its interconnect competitor. The tactics utilized by Bell with respect to the interface, a device whose sole purpose and intent can be nothing less than anti-competitive in approach also does not appear to me to represent "fair" competition, particularly in view of the obvious anti-competitive effect of the interface price itself. Unless we receive protection from the Federal government either in the form of legislation or legal action I am afraid you are going to see the walls of fairness which emanated from the Carterfone case come tumbling down. This would again free AT&T and the Bell System to deal with the American people as they will, the only protection being the inadequately staffed state regulatory bodies, continuing to accept as fact most of what this telephone monopoly says is fact.

Enclosures: Exhibits 1-82.

Exhibit 1

CALVIN COLLEGE,
Grand Rapids, Mich., October 9, 1969.

MICHIGAN BELL TELEPHONE Co.,
Grand Rapids, Mich.
(Attention: Mr. Charles Wyrick).

GENTLEMEN: In our continuing quest for improved efficiency we have entered into a communications consulting agreement with Telephone Power, Inc. The terms of our agreement call for study and evaluation of all aspects of our telephone communications equipment, procedures and costs. A probing analysis will be made into matters pertaining to our company's operation as well as an examination of the services provided by the Telephone Company.

Your co-operation is respectfully requested in making available all information and services to which our company is entitled. Telephone Power, Inc. will serve as our agent in all matters pertaining to our telephone system and as such, we ask that you provide all data that may be requested pertaining to equipment, directory listings, equipment billing, toll billing, and message unit billing for all telephone numbers billed to Calvin College and Seminary. Further, as our agent, Telephone Power, Inc., will have the right to prepare copies and analyses of all information pertaining to our telephone system in carrying out the terms of our agreement with them.

As the study progresses, certain equipment changes may be advisable and you are asked to accept and process all orders for change that are submitted to you by Telephone Power, Inc. relating to all telephone numbers billed to Calvin College and Seminary.

The Telephone Company is released from any liability that may be incurred as the result of making information available to or accepting instructions from Telephone Power, Inc.

In summary, you are entitled and expected to deal directly with Telephone Power, Inc. on all matters pertaining to the telephone communications system for our company. This authorization begins as of October 9, 1969 and extends through April 30, 1971.

Cordially yours,

HENRY DE WIT.
Vice President of Business and Finance.

Exhibit 2

CALVIN COLLEGE,
Grand Rapids, Mich., December 19, 1969.

MICHIGAN BELL TELEPHONE Co.
Grand Rapids, Mich.

(Attention: Charles Wyrick, Communications Representative).

GENTLEMEN: A study of our Telephone Communication System and an evaluation of our needs on campus reveal the merits in considering major changes in our system. It is clearly apparent that installation of a Centrex 1 CO would be one viable option. We would appreciate knowing at the earliest possible date the availability of a Centrex 1 CO system.

There is, no doubt, a required lead time for the installation of Centrex, and to expedite our planning process we would like to do some parallel planning in anticipation of interconnection. So that we may evaluate all of the possibilities we would appreciate knowing the approximate time when privately owned equipment can be connected to the Bell Telephone Company lines now serving our campus. I am sure you recognize the importance in having the date of Centrex availability and that of interconnection possibility as we try to determine the best solution to the growing needs at Calvin College.

Because of numerous planning activities pertaining to programs and personnel, the coordination of schedules is most important. Would you please plan your response so that we may have it no later than January 30, 1970? This will enable making a valid decision, offering the most efficient for the cost, which we are sure you would recommend. We will await your reply.

Cordially yours,

HENRY DE WIT, '
Vice President.

Exhibit 3

MICHIGAN BELL,
Grand Rapids, Mich., January 26, 1970.

CALVIN COLLEGE & SEMINARY,
Grand Rapids, Mich.

(Attention: Henry DeWit, Vice President).

DEAR SIR: This letter is in reply to yours dated December 19, 1969 regarding:

A. Availability of a Centrex 1 CO System.

B. The approximate time when privately owned equipment can be connected to Bell Telephone Company lines now serving your campus.

A. *Availability of Centrex 1 CO.*—In order for the Telephone Company to determine the availability of Centrex several factors must be considered. Two of these basic factors are not available to us at the present time:

1. Station requirements and forecast. . . . Attached is a letter to Telephone Power, Inc., requesting this needed information. As of this date we have not received a reply.

2. Traffic Studies. . . . An up-dated traffic study of Knollcrest, Franklin, and Boer Bennick switchboards is necessary. Due to vacations, exams, etc., at Calvin during the last two months, this study was not taken. It is scheduled during a representative period in February, 1970.

As soon as we receive these two (2) items of information we will submit your Centrex request to our Staff people to determine feasibility and availability. We will then report the results to you as soon as possible.

B. *Interconnection.*—In December, 1968, Michigan Bell Telephone submitted a request to the Michigan Public Service Commission to allow interconnection of customer-owned and maintained equipment to our facilities. As of this date the M.P.S.C. has not approved our request. As soon as the M.P.S.C. approves our request, and appropriate Tariffs are filed interconnection to privately owned equipment will be allowed. We will be happy to forward this information to you when it becomes available.

If you have any further questions, or if I can be of any service to you, please call me on 459-3485.

Sincerely,

CHARLES L. WYRICK,
Communications Representative.

Exhibit 4

TELEPHONE POWER, INC.,
Grand Rapids, Mich., February 6, 1970.

MICHIGAN PUBLIC SERVICE COMMISSION,
Lansing, Mich.

GENTLEMEN: Our client, Calvin College and Seminary, Grand Rapids, Michigan, recently initiated a request to the Michigan Bell Telephone Company regarding interconnection of privately owned equipment to telephone company facilities. The Michigan Bell Telephone Company in their response, have indicated that the Michigan Public Service Commission has not approved their interconnect request.

As agents for Calvin College and Seminary, we would appreciate knowing what the status of interconnection is and when a conclusive approval might be expected from the commission.

Any assistance and information you might provide, would be greatly appreciated.

Sincerely,

DEAN W. SWITZER,
Vice President.

Exhibit 5

MICHIGAN BELL,
Grand Rapids, Mich., March 23, 1970.

Re Calvin College & Seminary.

Mr. DEAN W. SWITZER,
*Telephone Power Inc.,
Grand Rapids, Mich.*

DEAR MR. SWITZER: This is to confirm our conversation of March 20, 1970. As requested we are supplying the following information.

A. We will as of August, 1970, have sufficient facilities to serve 45 off-premise stations from 1801 E. Beltline S.E., to 1330 Franklin S.E.

B. The total station and trunk capacity of the two (2) positions of 552A Switchboards is 80 trunks and 620 stations.

C. We have completed our study of billing errors as pointed out by TPI and will adjust them on the April 4, 1970 bill. We will supply you with total adjustment by March 26, 1970.

D. We are processing your request for information on Toll Terminals, if we do not have an answer by April 15, 1970 we will follow-up and advise.

E. We are checking on the information concerning coin telephones and will advise you on this matter by April 1, 1970.

F. A letter has been sent to H. DeWitt concerning Interconnection as of this date.

G. We will have an answer to Calvin's request for Centrex I C.O. and will advise Mr. DeWitt approximately May 1, 1970.

H. The station addition and switchboard addition will be tentatively completed by September 1, 1970. The equipment room will need to be ready and approved by June 1, 1970. Please note that these are tentative dates. We will advise you of firm dates as soon as they are available.

I. Our recommendation for a third position of 552A switchboard was based on your station projections supplied on January 30, 1970.

J. We will have an answer to question concerning the repair status on stations at the Franklin Campus to you on March 25, 1970.

If you have any further questions please call me at 459-9633.

Sincerely yours,

DANIEL P. CARY,
Sales Representative.

Exhibit 6

MICHIGAN BELL,
Grand Rapids, Mich., March 24, 1970.

CALVIN COLLEGE & SEMINARY,

Grand Rapids, Mich.

Attention: Henry DeWitt, Vice-President

DEAR MR. DEWITT: In regards to your question on December 19, 1969, concerning interconnection of privately-owned equipment to Michigan Bell Lines, we are forwarding the following information.

On March 9, 1970, the Michigan Public Service Commission, approved tariffs for the interconnection of privately-owned equipment to Michigan Bell Lines. These tariffs are available for your examination in any of our public offices.

If I can be of any further assistance, please call me at 459-9633.

Sincerely yours,

DANIEL P. CARY,
Sales Representative.

Exhibit 7

TELEPHONE POWER, INC.,
May 15, 1970.

Mr. HENRY DEWITT,

*Vice President of Finance, Calvin College,
Grand Rapids, Mich.*

DEAR MR. DEWITT: Please find enclosed a copy of Mr. Cary's letter to myself regarding Centrex availability.

I will notify you when I am in receipt of further correspondence regarding the Centrex request.

Most sincerely yours,

DEAR W. SWITZER,
Vice President.
MICHIGAN BELL,
Grand Rapids, Mich., May 8, 1970.

Mr. DEAN W. SWITZER,
Telephone Power Inc.,
Grand Rapids, Mich.

DEAR MR. SWITZER: With regards to Centrex Service for Calvin College we will have an answer in writing to you by June 1, 1970.

If you have any further questions please call me at 459-4848.

Sincerely yours,

DANIEL P. CARY,
Sales Representative.

Exhibit 8

MICHIGAN BELL,
Grand Rapids, Mich., June 1, 1970.

Re Toll Terminal Instruments.

TELEPHONE POWER, INC.
Grand Rapids, Mich.

Attention: Dean W. Switzer, Vice President.

GENTLEMEN: The following is in response to your inquiry concerning your policy regarding the provision of toll terminals in college dormitories for student toll usage.

Toll terminals are sometimes terminated in non-coin instruments at colleges to afford students access to the Toll Operator for out-collect, third number or credit card calls; the instruments can be considered public and may be provided on a non-bill basis where volume of usage warrants. These instruments, however, must be located in public places (hallways, etc.) and not in student rooms.

As we discussed, we reserve the right to decide whether or not such service can be provided on a non-billed basis. Our determination, of course, must consider volume of usage expected.

If you have any further questions, please call me on 459-9868.

Sincerely yours,

CHARLES L. WYRICK,
Sales Manager.

Exhibit 9

Mr. HUNT: This concerns the provision of Centrex service Calvin College and Seminary in Grand Rapids.

We have received a demand request to provide Centrex I CO service from the customer and from Telephone Power Incorporated, an independent consultant, handling their account.

The College now has a 701 system and, upon completion of a station addition and new dormitory this fall, will have 214 administrative and 400 dormitory stations. Future requirements include 50 stations for a new Administration Building in May, 1971, and 500 stations for six additional dormitories and a Service Building by 1976.

While we feel the quality of this customer's service is reasonably good, the customer is sold on the need for an improved system (Centrex). If we do not offer him a Centrex proposal his alternatives are as follows: Keep the present service; buy service from another supplier; install RF (Residence Flat Rate); and service in Dormitories.

We think he will buy from another supplier.

In order to provide Centrex I CO service, the existing Grand Rapids East Central Office would have to be modified. If this is done service could be provided in August, 1972, otherwise, no scheduled addition is planned for this office until 1985 or 1990.

Following are the costs, annual charges required and revenue expected, based on 2 consoles, 300 administrative stations and 900 dormitory stations:

Centrex I CO:

Gross additions-----	\$682, 500
Resulting investment-----	488, 700
Charges required-----	146, 100

Revenue expected:

Existing rates-----	81, 700
Proposed rates-----	91, 770

The rate of return as the system grows will be about 5 percent which we recognize is below our desired level. However, the customer has specifically requested charges and the installation interval for Centrex I CO and has stated that if we will not provide this service he has definite plans to explore the use of a privately-owned system.

We recommend your approval to offer Centrex I CO service to the college.

Attachment.

CALVIN COLLEGE—PARK LYONS, CENTREX I CO.

	Cutover (percent)	End of period (percent)	Investment
Under present rates-----	-3.1	0.8	\$418, 176
Proposed rates-----	-1.6	2.6	408, 722

NOTES

- I. Connecting devices for customer-owned Centrex CO will be available in the 3d quarter 1971. System recommend rates of D10 \$25 per trunk; for A100 \$60 per system with an additional rate per trunk not yet developed.
- II. Student toll dialing will be agreeable with COAM Centrex on a special assembly basis is the feeling presently.

Exhibit 10

MICHIGAN BELL,
Grand Rapids, Mich., July 6, 1970.

Mr. DEAN W. SWITZER,
Vice President, Telephone Power, Inc.,
Grand Rapids, Mich.

DEAR MR. SWITZER: Since our conversations the week of June 26, I have had several meetings with our Engineering and Planning people regarding Centrex for Calvin College.

I'm sorry a final decision has not been made as yet. My plan is to be in Detroit again July 6, to continue my attempts to finalize this matter. I'm very optimistic that I will be able to contact you with our decision during the week.

Again, my apologies for any inconvenience this delay has caused you and your client. Because of the physical and economic magnitude of this proposed project, many considerations must be dealt with.

I will call you by July 8, to give you the status and hopefully the firm reply to your questions.

Sincerely,

C. L. WYRICK,
District Sales Manager.

Exhibit 11

July 10, 1970.

Mr. HENRY DEWITT,
Vice President, Calvin College,
Grand Rapids, Mich.

DEAR MR. DE WITT: This is in reply to your letter of December 19, 1969 and subsequent discussions with Mr. D. Switzer regarding the availability of Centrex I C.O.

We are sorry for the length of time involved in conducting our feasibility study; however, a project of this magnitude requires careful consideration

Switzer in the near future to discuss pricing, procedures, and time frames in from the standpoint of Central Office work involved as well as optimum service arrangements for your needs.

We can provide Centrex I C.O. service for Calvin College with a target date of August 1972, to coincide with the fall term and plan a meeting with Mr. order to meet this date.

If you have any further questions, please call me on 459-9868.

Yours very truly,

CHARLES L. WYRICK,
Sales Manager.

Exhibit 12

TELEPHONE POWER, INC.,
August 3, 1970.

Mr. DAN CARY,
Communication Representative, Michigan Bell Telephone Co.,
Grand Rapids, Mich.

DEAR MR. CARY: Please provide me with the cost to purchase outright the existing outside cable facilities and the inside cable facilities at Calvin College and Seminary, Knollcrest Campus. Also, please provide the leasing cost for the same. I would request you itemize by location all of the pertinent cost information.

Since timing is an important factor in meeting projected building plans, would you plan your response by September 1, 1970.

Thank you for your cooperation.

Sincerely yours,

DEAN W. SWITZER,
Vice President.

Exhibit 13

MICHIGAN BELL,
Grand Rapids, Mich., August 17, 1970.

Mr. D. V. Mc KERSIE,
President, Telephone Power, Inc.,
Grand Rapids, Mich.

DEAR MR. Mc KERSIE: This is in reply to a number of letters recently received from your organization dealing with three questions in common to several accounts you represent.

1. *C D 9 interconnection units*

The current procurement interval for this equipment is approximately six weeks from order. Since availability is changeable according to demand and production changes, an approximate installation date will be established as each order is placed.

2. *Purchase/Lease of cable facilities*

Your requests are being processed through the appropriate groups in our company. Since considerable time, including field determinations is required, it is estimated that a minimum of sixty days may be required to make final determinations in each case already forwarded and any future requests you have of this nature.

3. *D. I. D. availability*

We have forwarded your requests to higher management for their advisement, but in any event we will require further details in each case before even an approximate interval can be determined, i.e., how many lines will be required; initially, two years after, and five years after change-over.

This information should be provided, in writing, to me or the representative assigned each account to ensure proper planning initially and for future needs.

In addition to the foregoing, your letter of August 4, 1970 relating to our July 29 meeting requires the determinations of several specialized groups and is in the process of being consolidated for reply as early as possible.

Sincerely,

E. F. GIETZEN,
District Sales Manager.

Exhibit 14

August 25, 1970.

Mr. E. F. GIETZEN,
District Sales Manager,
Michigan Bell Telephone Co.,
Grand Rapids, Mich.

DEAR MR. GIETZEN: This letter is in reply to your letter of August 17, 1970. For the most part your response is unacceptable.

Regarding the CD9 availability, I feel anything less than installation quoted intervals on your terminal gear is discriminatory. I would request that you provide me with the standard intervals for basic systems, e.g., key telephones, call directors, manual PBX, dial PBX (100, 160, 200, 300), Centerex I & II.

Regarding the purchase of cable facilities, I find it difficult to believe you can order and install a call director system in two weeks yet it takes sixty days for a cable evaluation! I can understand that large complex systems could require the time you indicate, but I cannot accept a minimum of 60 days. Further, I would be interested in the maximum number of days.

Regarding the D.I.D. request, I should be pleased to discuss the requirements you indicate. However, I have not heard from any of your representatives as yet.

In our meeting with you and your staff personnel, we indicated the need for rapid coordination. Currently, we are expanding our operation throughout the State of Michigan. I trust that a greater effort can and will be made in resolving our interconnect requests.

Sincerely,

DEAN W. SWITZER,
Vice President,
Telephone Power, Inc.

Exhibit 15

MICHIGAN BELL TELEPHONE CO.,
Grand Rapids, Mich., September 8, 1970.

TELEPHONE POWER, INC.,
Mr. D. W. Switzer, Vice President,
Grand Rapids, Mich.

DEAR MR. SWITZER: Your letters of August 25 and September 3 requested information of a general nature which I have passed along to our headquarters group for reply.

It is within that group we are attempting to establish a liaison point for firms such as yours to enable direct contact in matters of this nature. Although some time has passed since this was originally discussed with your Company, this matter is being given every consideration. The time involvement is necessary to ensure that a workable and expeditious process is properly implemented.

With regard to your requests for D.I.D. time-table information, it is not expected that this service will be available on an interconnected basis before mid 1971.

If you should wish to provide further information on the accounts you previously referred to, we will be happy to coordinate this for you. Since the time requirements and study efforts to make determinations by Central Office are considerable, we cannot initiate any activity until fairly precise forecasts are given in writing.

I am sure you can appreciate this position, however, if you should desire, I'll be happy to discuss at your convenience.

E. F. GIETZEN,
District Sales Manager.

Exhibit 16

September 30, 1970.

Mr. LEO F. EGAN,
General Marketing Manager,
Michigan Bell Telephone Co.,
Detroit, Mich.

DEAR MR. EGAN: Sometime ago my associate and myself met with your Grand Rapids Marketing Manager and several people from the Detroit Marketing Staff.

In our discussion we outlined several questions regarding interconnection and suggested that the Telephone Company establish a liaison between equip-

ment distributors at the policy making level. After our initial meeting with your staff, we formally submitted our questions. Further, we initiated many "interconnect" information letters with little or no response. I have discussed some of these requests with Mr. Ray Daily of your company. Unfortunately, he has not been able as yet to resolve the questions either.

Considering the lengthy time lapse from our initial request, and all the subsequent letters, it would seem to me we have waited a reasonable time for performance.

I would appreciate any assistance your office can lend to expedite the answers we need.

Thank you for your cooperation.

Most sincerely yours,

DEAN W. SWITZER,
Vice President,
Telephone Power, Inc.

Exhibit 17

MICHIGAN BELL.
Grand Rapids, Mich., October 26, 1970.

Mr. DONALD V. MC KERSIE,
President, Telephone Power, Inc.,
Grand Rapids, Mich.

DEAR MR. MC KERSIE: The following information is provided in reply to a number of questions raised by you and other members of your firm over the past several months.

1. Business Line rate versus Trunk rate applied to an interconnected system.

Generally, the criteria for applying trunk or business line rates will be determined by the operational characteristics of the consumer-owned equipment as compared to Bell provided service. For example, if the private equipment operates the same as Bell key or call director systems, the Business line rate is appropriate. Situations where there is doubt as to the appropriate rate will necessarily have to be judged individually.

2. Provision of interconnection to secretarial switchboards.

The only interface arrangement currently available for this arrangement is the CD6. This was designed primarily for use with manual switchboards and consequently is priced for that use. Therefore, it may seem expensive when used for terminating subscribers' lines on a secretarial switchboard. We are aware of the situation and are attempting to develop a workable arrangement but cannot offer a time-table for completion at this time.

3. Interface arrangements for customer-provided Centrex.

Direct Inward Dialing connecting devices are expected to be available by mid-1971. Equipment to provide Automatic Identified Outward Dialing is anticipated during the fourth quarter 1971.

4. Feasibility Studies for customer-provided Centrex.

Since Centrex service may be requested in any of a variety of Central Offices, a time frame cannot be established. As is the case with Bell provided Centrex, study intervals vary with each case involved.

5. Provision of Telephone Directories.

Telephone Directories are furnished primarily for the completion of calls and as such, will be furnished under the tariff regulations whether the customer utilizes Bell or private equipment.

6. Training of users of private equipment.

With the many types of private equipment available on the market, along with the individual operating characteristics, it would be virtually impossible for Bell to train its own people on all equipments. Therefore, we cannot provide training for customers on privately owned equipment, even though some may be similar to ours in operation.

7. 100% Bell or privately supplied equipment.

There is no firm requirement that all equipment be customer or Bell provided. However, with the interface devices available today, it would seem impracticable to provide mixed systems. Each request for a mixed system would have to be considered individually dependent upon the type interface devices requested.

8. Provision of Toll Terminals to Hotels or Motels using private equipment.

The type of equipment utilized, Bell or private, would have no bearing on the provision of toll terminals. The terminals will be provided, where facility

conditions permit, when it is in the public interest for the completion of long distance calls.

9. Telephone access to radio paging equipment.

We can only assume from your request that you wish to enter into a connecting agreement as a Miscellaneous Common Carrier. If this is correct, there is much more information required, i.e., is the connection to be manual or dial, how many customers to be served, type of equipment to be used, etc.

We stand ready to enter into an agreement with any Carrier who has received a license from the F.C.C. and is certified by the MPSC as outlined in our tariffs. (MPSC Tariff 2, Sheet 113). We are willing to provide a Carrier with a letter of intent to interconnect to enable him to obtain the proper licensing from the F.C.C.

I hope the above information is sufficient for your purposes. If you have any questions, please call me.

Sincerely,

E. F. GIETZEN,
District Sales Manager.

Exhibit 18

TELEPHONE PROPOSAL FOR
CALVIN COLLEGE AND SEMINARY, GRAND RAPIDS, MICH.

(By Dean W. Switzer, Telephone Power, Inc.,
Grand Rapids, Mich., Distributor For Stromberg-Carlson)

BASIC COMMUNICATION NEEDS

I. INCOMING CALLS

There are two types of incoming calls: A. Those where the person, extension, or department is known. B. Those where the person, extension, or department is unknown.

At present your operators handle 100% of the incoming calls. Studies indicate that 88% of these calls could be dialed indirectly, resulting in: A. Reduced operator work load. B. Need for fewer operators.

II. OUTGOING CALLS

There are also two types of outgoing calls: A. Those that are dialed direct. B. Those handled by your operator such as Long Distance Calls. Presently most outgoing calls are dialed direct except Long Distance calls.

III. INTRA-CAMPUS CALLS

These are calls from dorm to dorm etc.

SPECIFIED COMMUNICATION NEEDS

- I. Transfer of Calls.
- II. Allocation of Expanses.
- III. After-hours Coverage.
- IV. Conference Calls.
- V. Privacy on Calls.

December 14, 1970.

CALVIN COLLEGE AND SEMINARY

STROMBERG-CARLSON CENTREX FEATURES

- Turret Attendant Position.
- Direct Inward Dialing (D.I.D.).
- Direct Outward Dialing (D.O.D.).
- Call Transfer (Incoming).
- Call Transfer (Outgoing).
- Attendant Transfer.
- Night Answering (Universal).
- Toll Restriction ("1" and "O").
- Conferencing (Meet Me Basis—1 Trunk and 6 Stations).
- Camp On Busy.
- Consecutive Number Hunting.
- Tone Dial (Push Button Dialing).
- Station Restriction.
- Station To Station Dialing.

(Identified outward toll dialing can be provided. Tariff not finalized—1971.)

MICHIGAN BELL CENTREX I C.O. FEATURES

Console Attendant Positions.
 Direct Inward Dialing (D.I.D.).
 Direct Outward Dialing (D.O.D.).
 Identified Outward Toll Dialing.
 Station To Station Calling.
 Station Hunting.
 Restriction From Outgoing Calls.
 Call Transfer Attendant.

PROPOSED SYSTEM 770 LINES

Stations: 260 Lines Administration Tone Dial. 510 Lines Students.
 Trunking: Direct Inward Dial (D.I.D.) and Direct Outward Dial (D.O.D.):
 23 D.I.D.,¹ 23 D.O.D.¹

Consoles: One Attendant Turret.²

Equipment Space: Bolt Heyns Hall (same as MBT proposed space), 1300
 Station Capacity.

General Notes

1. Height of ceiling 10'6"
2. Height of equipment 9'0"
3. Weight of equipment 125 lbs. P.S.F.
4. Cable vault entrance.

CALVIN COLLEGE AND SUMMARY, CENTREX COST ANALYSIS

	MBT Centrex I C.O.	Installation	Stromberg-Carlson Centrex C.U.	After 10 years
Consoles.....	\$300.00 (2)	\$400.00	(1)	
Trunking ¹			² \$230 (46)	(230)
Trunking interface ¹			² 276 (46)	(276)
250 Administration stations at \$7.50.....	1,875.00	2,200.00		
10 administration at \$6.50.....	65.00	80.80		
510 Centrex demormitory stations at at \$4.80.....	2,448.00	4,488.00		
Toll diversion (240 station) ¹	70.00	1,275.00		
Key equipment ¹	477.83			
Stromberg-Carlson Centrex 10-yr amortized cost.....			³ 2,910	
Maintenance (\$1 per telephone).....			⁴ 770	(770)
Total.....	5,235.83	8,443.80	4,186	(1,276)

¹ Estimated.

² Tariff not finalized, mid-1971.

³ See cost breakdown.

⁴ Moves, changes, and additions based on time and material.

¹ The trunk interconnect adapters proposed are estimated prices pending customer negotiations with Telephone Company as to final arrangements.

² Distance estimated within 200' from distributing frame.

CALVIN COLLEGE AND SEMINARY,
December 14, 1970.

PROJECTED SAVINGS

First 10 Years Non-Growth

Equipment:

MBT—\$5,235 times 120 months equals \$628,200 ten year cost (non-growth).

TPI—\$4,186 times 120 months equals \$502,320 ten year cost (non-growth).

Operators:

MBT Centrex I C.O., 2 consoles; TPI Stromberg-Carlson Centrex, 1 console.

Estimated savings per year \$3,200; \$3,200 times 10 years equals \$32,000 savings.

MBT cost	\$628, 200
TPI cost	502, 320
Equipment savings	125, 880
Operator savings	32, 000
10-yr projected savings	157, 880
2d 10-yr MBT cost	628, 200
2d 10-yr TPI cost	153, 120
2d 10-yr equipment savings	475, 080
2d 10-yr operator savings	32, 000
Combined operator and equipment 1st 10-yr savings	157, 880
20-yr projected savings	664, 960

CALVIN COLLEGE AND SEMINARY,
December 14, 1970.

STROMBERG-CARLSON CENTREX COST BREAKDOWN

Equipment cost:

Equipment switching system (770 lines) and turret (1)	\$216, 096
Dormitories—510 residence hall telephones	20, 400
Administration	
171 Single line tone dial instruments (\$75)	12, 825
55 3-line tone dial instruments ¹ (\$180)	9, 900
34 5-line tone dial instruments ¹ (\$200)	6, 800
Apparatus Cabinets ²	2, 000
Intercoms ²	1, 000
Power supplies ²	500
Miscellaneous (bells, speakerphones, etc.) ²	500

Equipment cost (installation approximately 18 months)	270, 021
---	----------

Installation cost:³

Equipment—Switching system (770 lines) and turret (1)	² 25, 000
Dormitories	² 10, 200
Administration	² 9, 000
Outside Cable Distribution: (combination of trenching, plowing, and conduit winter months excluded 60 days)	² 35, 000
Installation cost	79, 200
Total equipment and installation	349, 221

¹ Based on system design (key plans).

² Estimated.

³ Bell cable purchase option.

Exhibit 19

MICHIGAN BELL,
Grand Rapids, Mich., December 17, 1970.

Mr. DEAN W. SWITZER,
Vice President,
Telephone Power Inc.,
Grand Rapids, Mich.

DEAR MR. SWITZER: This will confirm our conversation of December 15, 1970 concerning Centrex I-CO Service for Calvin College and Seminary.

In our letter of October 13, 1970 we requested a decision on Centrex Service by December 1, 1970 in order to meet your requested service date of August, 1972. Because of the amount of planning and work involved in providing Centrex, our Engineering staff requires 18 months lead time. We have a great deal of information to complete after contracts are signed to provide the necessary data to our Engineering staff by January 4, 1971.

It is doubtful that we will be able to meet your request date of August, 1972 unless contracts are signed in the next few days.

If you have any further questions or if I can be of any assistance please call me at 459-4848.

Sincerely yours,

DANIEL P. CARY,
Communications Representative.

Exhibit 20

CALVIN COLLEGE AND SEMINARY, GRAND RAPIDS, MICH., CENTREX I C.O. PROPOSAL
(Michigan Bell Telephone Co., Jan. 29, 1971)

With the increasing complexities of profitably running an educational institution, management today is relying more and more on effective communications.

But communication needs of colleges differ. The type of school, its size and the number of students, the number of buildings, and so on, dictate certain requirements.

What type of system will best meet your communication requirements? What choices are available?

As a way of answering these questions, let's look at the changing communication needs of Calvin College.

With over 1700 employees, 200 installation and repair personnel; 170 installation and repair vehicles, \$1,000,000 in parts inventory, \$250,000 in test equipment; in Grand Rapids alone, supplemented as needed from other areas, Michigan Bell Telephone can provide the: Speed, Quality, Availability, Accountability; needed to serve a customer the size of Calvin College.

COST COMPARISON

As discussed previously, Calvin College has two ways to meet their future communication needs: A. Retain and expand the present system. B. Change to Centrex Service.

The following page illustrates comparative costs between Centrex I C.O. Service and the present Series 100 Dial System. For comparison purposes we have used cutover and 5 year costs computed on projected requirements, as furnished by the college, using an assumed date of August 1972 (Centrex cutover).

COST COMPARISON

Centrex I—Co		Present system	
August 1972:		August 1972	
2—Attendant consoles.....	\$300	3—Switchboards (552).....	\$252.50
260—Admin. stations.....	1,940	260—Admin. stations.....	845.00
510—Dorm stations.....	2,448	510—Dorm stations.....	1,657.50
Miscellaneous equipment ¹	290	Miscellaneous equipment ¹	290.00
Monthly cost.....	\$4,968	Mileage.....	568.00
		46—PBX trunks.....	844.10
		Toll diversion ²	75.00
		Monthly cost.....	\$4,532.10
August 1977:		August 1977:	
2—Attendant consoles.....	\$300	3—Switchboards.....	\$252.50
310—Admin. stations.....	2,265	310—Admin. stations.....	1,007.50
950—Dorm stations.....	4,560	950—Dorm stations.....	3,087.50
Miscellaneous equipment ¹	372	Miscellaneous equipment ¹	372.00
Monthly cost.....	\$7,497	Mileage.....	960.00
		57—PBX trunks.....	1,045.95
		Toll diversion.....	75.00
		Monthly cost.....	\$6,800.45

¹ Key Equipment, Intercoms etc.

² For the first 25 trunks equipped.

Exhibit I.—Charges to Customer

Based upon the obligations and limitations as set forth in the Contract and in this Exhibit the charges for the service are as follows:

2 Centrex CO—Console @ \$150.00 each, per month.

250 Centrex CO—Stations @ \$7.50 per station, per month.

10 Centrex CO—Stations @ \$6.50 per station, per month.

510 Centrex Dormitory Stations @ \$4.80 per station, per month.

A minimum monthly charge of \$1875.00 is applicable for Centrex Switching Equipment and Dial Stations.

The above charges are subject to change upon authorization by the Michigan Public Service Commission or its successors.

In addition to these equipment costs there are three other items which must be considered:

A. Reduced Equipment Room Space

Since the majority of the Centrex switching gear will be located in the Michigan Bell Central Office, substantially less equipment room space will be needed at the Calvin Campus.

B. Reduced "Operator" Area

Modern attractive consoles, able to fit on a standard desk, will replace the present switchboards. The expense of expanding the present "operator" area for 3 positions of cord switchboard will be eliminated. A more professional, decorative atmosphere will be the result.

C. Reduced "Operator" Salaries

Since Centrex Service reduces the attendant position requirements from three to two, one full time operator will be eliminated. This is a projected savings of from \$400. to \$600. per month plus benefits. In addition, because Centrex provides direct inward dialing capability the need for student operators after 5:00 P.M. will virtually be eliminated. Here again operator salaries are reduced.

Under the Student Toll Dialing arrangement the individual student will be billed at the rate of 20 cents for each toll bill rendered. If a student makes no toll calls in a given billing period, no statement or charge is applicable.

Based on the August, 1972 projections, the one time installation charge for this service is approximately \$7,200.00.

In summary, changing to Centrex I C.O. Service is more economical, all things considered, than retaining and expanding the present system.

Centrex I—C.O. Service is the most modern phone communication system available to colleges. It is designed to meet today's requirements and to grow as Calvin grows.

FEATURES OF CENTREX I—C.O.

I. Direct Inward Dialing

Your incoming calls reach you directly at any hour. People calling Calvin College will have the convenience of completion 20 seconds faster than if handled by an operator. Studies indicate that 88% of your present calls could be dialed in directly without operator assistance.

II. Automatic Identification of Outward Dialing

Michigan Bell Telephone will provide you a monthly statement of all Long Distance calls. Charges are identified with the number of the station from which they were placed and also the number called.

III. Student Toll Dialing

Students making Long Distance calls will be billed directly instead of Calvin College being responsible.

IV. Privacy

Complete privacy is insured on any incoming or outgoing call whether dialed direct or operator handled. The operator can re-enter the call only if recalled by the station user.

V. Station Hunting

Should you be busy on your phone, the incoming call can automatically ring and be answered at a predetermined alternate phone.

VI. Call Transfer

After you have concluded your discussion, your attendant can transfer the call to any other station at your request.

VII. Night Service

Calls coming to your main number after normal hours can be routed to a predetermined station.

VIII. Restriction

Any station on your system can be restricted from making other than intra-campus calls.

IX. Conference Calls

Your attendant can, at your request, arrange conference calls with 5 stations or 4 stations and 1 outside line.

X. Operator Space

Your system will be served with 2 modern attendant consoles instead of the present switchboards. The consoles conserve space and offer ease of operation.

XI. Switching Equipment Space

Most of the necessary switching equipment will be housed on Michigan Bell premises, thus conserving space and offering ease of maintenance.

XII. Data Use

Centrex is compatible to Voice and Data Communications. Its potential is unlimited whether communication requirements are man-to-man, machine-to-machine, or a mix of the two.

OTHER CONSIDERATIONS

Whenever a firm discusses the possibility of purchasing and/or leasing privately owned equipment several "hidden" costs must be considered:

A. Cost of Money. Our latest figures indicate a cost to the customer of from 6% to 8% either in loss of return on capital investment or in interest paid on the original investment.

B. Overhead. A conservative figure of 2% of the original investment is needed to offset the operating costs of a privately owned system. Some examples are: 1. Insurance. 2. Added bookkeeping expense. 3. Lights, heat space, etc.

C. Depreciation. Based on our latest figures an estimated 8% of the original investment must be set aside to replace original equipment. This replacement is necessary due to normal wear and tear.

D. Maintenance. Our overall figures indicate approximately 8% of the original investment is needed to offset the cost of maintaining a communications system. This includes such things as parts, labor, time out of service, etc.

Overall, then, approximately 24% to 26% of the original investment will be required to offset these "hidden" costs.

In addition to these costs other factors must be considered, such as:

A. Continuity of Service.

B. Routine moves and changes.

C. Out of service conditions resulting from a disaster.

D. Routine maintenance such as frayed cords, burned out lights, etc.

E. Cabling costs both intra and inter building.

CHOICES AVAILABLE TO CALVIN

At the present time your operators handle most basic and specific communication needs. They are a vital part of Calvin College's communication system. However, if we could remove the routine functions from the operators, the result would be: A. Improved service to those calling. B. Reduction in delays. C. Reduced operating expenses—fewer operators needed.

Studies have been made on the present system and they indicate two choices are available: A. Retain the present system and expand its capacity. B. Replace the system.

RECOMMENDATION

Michigan Bell Telephone Company recommends the installation of: CENTREX I C.O.

Centrex I—C.O. Service is the most modern and economical way to serve Calvin College's communication needs. Centrex is presently serving colleges throughout the State, such as, The University of Michigan, Eastern Michigan, Michigan State, Michigan Tech., and Western Michigan.

The major advantages of Centrex I—C.O. Service to Calvin College are: A. Direct Inward Dialing. B. Automatic Identification of Outward Dialing. C. Student Toll Dialing. D. Reduced Operation Costs.

In addition to these advantages, we will work closely with you before, during, and after your Centrex System is installed to insure a smooth transition and immediate benefit to Calvin College.

Of prime importance is the need to coordinate with your various departments in such areas:

A. Reviewing the needs of each telephone user.

B. Establishing a new telephone directory for you.

C. Formatting the listings of your departments, etc., in both the Grand Rapids white and classified directories.

D. Providing continuous training of your telephone users in the methods and advantages of Centrex.

E. Providing continuous training of your attendants on console operation.

These services Michigan Bell Telephone provides without additional cost to you.

All factors considered, we recommend installation of: CENTREX I C.O.

Exhibit 21

MBT CENTREX MONTHLY COST ANALYSIS (FEB. 1, 1971)

	Calvin College and Seminary			
	MBT Centrex I C.O.	Installation	Stromberg-Carlson Centrex C.U.	After 10 Years
Consoles.....	\$150(1)	\$200.00	(1)	
Trunking ¹			\$230(46)	(\$230)
Trunking interface ²			1,210(46)	(1,210)
250 administration stations 7.50.....	1,875	2,200.00		
10 administration 6.50.....	65	80.80		
510 Centrex dormitory station 4.80.....	2,448	4,488.00		
Key equipment.....	290(444)			
Stromberg-Carlson Centrex 10-year amortized cost.....			³ 2,910	
Maintenance (\$1 per telephone).....			⁴ 770	⁴ (770)
	\$4,828	\$6,968.80	\$5,120	\$2,210

¹ Assumed measured rate service trunk rate at \$5 each.² Estimated \$25 per interface unit plus \$60 per month common equipment charge.³ See cost breakdown.⁴ Moves, changes and additions based on time and material.

CALVIN COLLEGE AND SEMINARY
PROJECTED SAVINGS

First 10 years nongrowth

Equipment:

MBT.....\$4,828.00
Months.....× 120

579,360.00

Installation.....6,968.80

Total.....586,328.00

TPI.....5,120.00

Months.....× 120

Total.....614,400.00

TPI cost.....614,400.00

MBT cost.....586,328.80

MBT equipment savings.....28,071.20

Carrying charges ¹.....453,987.30

First 10 years MBT projected savings.....482,058.50

Second 10 years MBT cost.....579,360.00

Second 10 years TPI cost.....265,200.00

TPI equipment savings.....314,160.00

Carrying charges ¹.....244,454.70

Second 10 years TPI projected savings.....69,705.30

MBT first 10 years projected savings.....482,058.30

TPI second 10 years projected savings.....69,705.50

Total 20-year MBT projected savings.....412,353.20

¹ See attachment—related to costs of private ownership.

CARRYING CHARGES ON PRIVATELY OWNED EQUIPMENT

First 10 years—nongrowth

Cost of money or loss of return on capital:

Private equipment cost	\$349, 221. 00
	¹ . 06%

\$20, 953. 26
² × 10

\$209, 532. 00

Overhead/insurance and general operating costs:

Private equipment cost	349, 221. 00
	¹ . 02%

6, 984. 42
² × 10

69, 844. 20

Depreciation/based on 20 year average life, for sake of uniformity; however, MBT figures indicate actual average life to be approximately 15 years:

Private equipment cost	349, 221. 00
	¹ . 05%

17, 461. 05
² × 10

174, 610. 50

Total first 10 years carrying charges	453, 987. 30
---	--------------

Second 10 years—nongrowth

Overhead:

Private equipment cost	349, 221. 00
Private equipment cost	\$349, 221. 00
	¹ . 02

\$6, 984. 42
² × 10

\$69, 844. 20

Depreciation:

Private equipment cost	\$349, 221. 00
	¹ . 05%

\$17, 461. 05
² × 10

\$174, 610. 50

Total second 20 years carrying charges	\$244, 454. 70
--	----------------

Total 20 years carrying charges	\$698, 442. 00
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¹Annual.²Years.

Exhibit 22

TPI Inc.,

Grand Rapids, Mich., June 1, 1972.

Mr. F. M. HOPPE,
 Director of Public Utilities,
 Department of Commerce,
 Lansing, Mich.

DEAR MR. HOPPE: This will confirm my conversation today with Mr. Ostot, regarding my inquiry on the dormitory PBX trunk rates at Ferris State College in Big Rapids, Michigan.

There appears to be some disagreement whether business rates or residence rates should apply.

In Tariff 7, page 11, paragraph 3a, it states residence rates apply in, "Institutions when the use of the service is confined to the domestic use of the customer and listings of a business character are not furnished."

It is our belief that these dormitories are strictly domestic and that the residence trunk rate should apply whether the service is Centrex or a standard PBX system.

We would appreciate an immediate interpretation and reply by the Commission as we have several proposals pending for privately owned systems that will be effected by the new compulsory business measured rate effective in October, 1972.

Very truly yours,

DONALD V. MCKERSIE, *President*

Exhibit 23

TPI INC.,
Grand Rapids, Mich., June 2, 1972.

Mr. F. M. HOPPE,
*Director of Public Utilities,
Department of Commerce,
Lansing, Mich.*

DEAR MR. HOPPE: This is an appeal to the Commission to intervene on our behalf, with the Michigan Bell Telephone Company, to obtain trunk and interface rates for a customer owned Centrex system.

Without success, we have attempted many times since 1969, to obtain an estimate of these costs. Meanwhile, in an effort to discourage their customer from purchasing his own equipment, they have given the customer the costs to use against us.

Would you please assist us in obtaining specific rate information regarding interconnected Centrex service?

Very truly yours,

DONALD V. MCKERSIE, *President*

Exhibit 24

TPI INC.,
Grand Rapids, Mich. June 19, 1972.

Mr. CHARLES WYRICK,
*Sales Manager,
Michigan Bell Telephone Co.,
Grand Rapids, Mich.*

DEAR MR. WYRICK: Please be advised the Calvin College and Seminary has formally agreed to purchase a Stromberg-Carlson telephone system.

I would appreciate a meeting with you to discuss details of the cut-over procedures. I will call you to arrange for a time and place.

Thank you for your cooperation.

Sincerely yours,

DEAN W. SWITZER,
Vice President

Exhibit 25

MICHIGAN BELL,
Grand Rapids, Mich., June 30, 1972.

T.P.I. INC.,
Grand Rapids, Mich.

(Attention: Mr. D. W. Switzer, Vice President).

DEAR MR. SWITZER: This will confirm our discussion of June 29, 1972 regarding the provision of central office trunks to be interconnected with Non-Bell switchboard service for Calvin College dormitories.

We will provide interconnection to the on-Bell PBX in the dormitory via business flat rate trunks. These trunks will be converted to measured service approximately October 1973 when non-optional measured rate service goes into effect in the Grand Rapids District Exchange.

We have tentative number assignments as follows: 942-9150 through 942-9157 with 942-9158 and 942-9159 in reserve. 949-7301 through 7304 and 949-7971-7972-7973-7975.

As you know we cannot guarantee the use of these numbers until the actual date of installation.

Yours truly,

C. L. WYRICK,
Sales Manager.

TPI Inc.,
Grand Rapids, Mich., June 23, 1972.

Mr. CHARLES WYRICK,
Sales Manager,
Michigan Bell Telephone Co.,
Grand Rapids, Mich.

DEAR MR. WYRICK: This is to confirm our conversation regarding central office trunks. Calvin College will require 2 groups of residence flat rate combination trunks, 8 in each group. (2 in reserve), for the Residence Halls. They will also require 16 CDH Interface Units to work with the above trunks.

We would request a service date of August 14, 1972. Please have your installation personnel contact myself for location of the lines and equipment.

The service will be located in Bolt-Heys Hall, Knollcrest Campus.

Thank you for your cooperation.

Sincerely yours,

WILLIAM A. SCHNEIDER,
Sales Engineer.

GENERAL REGULATIONS—CLASSIFICATION AND USE OF TELEPHONE SERVICES

A. APPLICATION OF BUSINESS AND RESIDENCE RATES (FORMERLY SHEET 15)

1. The determination as to whether telephone service should be classified as Business or Residence is based on the character of the Use to be made of the service. Service is classified as business service where the use is primarily or substantially of a business, professional, institutional, or otherwise occupational nature. Where the business use, if any, is incidental and where the major use is of a social or domestic nature, service is classified as residence service if installed in a residence.

2. Business rates apply at the following locations, among others:

a. In offices, stores and factories, and in quarters occupied by clubs, lodges, fraternal societies, schools, colleges, libraries, hospitals and other business establishments.

b. In residence locations where the place of residence is in the immediate proximity to a place of business and it is evident that the telephone in the residence is or will be used for business purposes; and in residence locations where an extension is located at a place where business rates would apply.

c. In the residence of a practicing physician, dentist, veterinary, surgeon or other medical practitioner who has no service at business rates at another location.

d. In any residence location where there is substantial business use of the service and the customer has no service elsewhere at business rates.

3. Residence rates apply at the following locations, among others:

a. In private residences; in the residential portion of hotels, apartment houses, boarding houses, churches, or institutions when the use of the service is confined to the domestic use of the customer and listings of a business character are not furnished.

b. In the residence of a practicing physician, dentist, veterinary, surgeon or other medical practitioner provided that such residence is not a part of an office building and provided the customer has service charged for at business rates at another location.

c. In the residence of a nurse.

B. LOCATION AND USE OF TELEPHONE SERVICES (FORMERLY SHEET 15.1)

1. Use of Business and Residence Telephone Services:

a. Business subscriber telephone service, as distinguished from Public Telephone Service and excluding Semipublic Telephone Service and service in hotels, is furnished only for use by the customer, his employees and representatives, except as otherwise provided in the Telephone Company's Tariffs.

(1) Telephone service of a customer engaged in furnishing service of a secretarial nature or in the business of renting space to exhibitors may be used by a tenant of the customer for periods of not to exceed one month; on such usage no directory listing is permitted. A period of at least one month must elapse between each period of usage by a particular tenant.

(2) A customer engaged in furnishing services of a secretarial nature may not use Telephone Company facilities to receive messages for one party to be forwarded to another party, unless such forwarding is of a temporary or occasional nature.

b. Residence telephone service is furnished only in residence locations, for use by the customer and members of the customer's domestic establishment, except as use by others is permitted in certain cases as provided for elsewhere in these Regulations or the Telephone Company's Tariffs.

c. Residence service is not permitted in locations where the service is used as an adjunct to business service.

Issued under authority of Mich. Pub. Serv. Comm. Order dated Oct. 27, 1966, Case No. U-2559.

Issued: November 21, 1966. Effective: November 26, 1966.

W. C. PATTERSON,
Vice President,
Detroit, Mich.

LOCAL TELEPHONE EXCHANGE SERVICES, PRIVATE BRANCH EXCHANGE TRUNK LINES

Trunk lines (Excluding Metropolitan Service).

1. Class A, Class B, Class C and Series 75.

WITHIN BASE RATE AREAS (PER TRUNK)

Rate group	Business (excluding hotels)		Transient, family, and apartment hotels		Residence	
	Message	Flat	Message	Flat	Message	Flat
	(1)	(1)	(1)	(1)	(1)	
Rate group A.....		\$13.85		\$10.60		\$6.35
Rate group B.....		14.65		11.10		6.75
Rate group C.....	¹ \$5.45	¹ 16.30	¹ \$5.45	¹ 12.20	¹ \$4.50	7.10
Rate group D.....	5.45	¹ 18.30	5.45	¹ 13.55	¹ 4.50	7.50
Rate group E.....	5.45	¹ 21.15	5.45	¹ 15.45	4.50	8.25
Rate group F.....					4.50	9.00
Detroit zone.....	5.45		5.45		4.50	9.75

Note.—On message rate trunks, messages between stations in the local service area are charged for at \$.045 each.

¹ Business message rate trunks are available in group C zones of Detroit district exchange; not available in other group C exchanges or zones.

² Residence message rate trunks are available in group C and D zones of Detroit district exchange; not available in other group C or D exchanges or zones.

³ Available on a temporary basis in group C zones of the Detroit district exchange. All flat rate trunks are to be regraded by Oct. 16, 1972.

⁴ Available on a temporary basis. All flat rate trunks in zones of Detroit district exchange are to be regraded by Oct. 16, 1972; and in other exchanges and zones by Oct. 16, 1973.

WITHIN LOCALITY RATE AREAS (PER TRUNK)

Group A exchanges	Business (excluding hotels)		Transient, family, and apartment hotels		Residence flat
	Message	Flat	Message	Flat	
Exchange Locality Rate Area:		(1)		(1)	
Algonac-Harsen's Island.....		\$15.45		\$12.20	\$7.85
Armada-Berville.....		17.10		13.85	9.35
Baldwin-Idlewild.....		15.45		12.20	7.85
Cadillac-Lake Mitchell.....		14.65		11.40	7.1
Calumet-Eagle River.....		18.70		15.45	10.80
					5

Note.—Material previously on this sheet replaced by material on sheets 26.1 thru 26.5.

Issued under authority of Mich. Pub. Serv. Comm. Order dated Dec. 1, 1971,
Case No. U-3838.

Issued: December 4, 1971. Effective: December 4, 1971.

L. J. HAYNES,
Vice President,
Detroit, Mich.

Exhibit 26

MICHIGAN BELL,
Grand Rapids, Mich., July 18, 1972.

CALVIN COLLEGE,
Knollcrest Campus,
Grand Rapids, Mich.

DEAR SIR: We have completed an inventory of Michigan Bell Telephone Company facilities as agreed upon in our letter of June 23, 1972.

Following is a list of Michigan Bell Telephone Company cable facilities on your premises at Schutz-Eldersveld Hall:

- A. 50 feet of 25 pair, 24 gauge, cable.
- B. 10 feet of 6 pair, 24 gauge cable.
- C. 340 feet of 50 pair, 24 gauge cable.
- D. 4,000 feet of station wire AT8378 No. D Quad.
- E. 4—25 pair terminal blocks.
- F. 3—50 pair terminal blocks.

The current value of those facilities is \$1,695.42.

This should not be considered an offer to sell all or any part of the above listed facilities, and is intended only to inform you of the maximum sale price in the event a satisfactory purchase agreement is reached.

Should you wish to effect a purchase agreement, based on the above listed inventory, we will be pleased to discuss this with you.

Sincerely,

M. C. DeWitt.

Exhibit 27

TPI INC.,
Grand Rapids, Mich., July 21, 1972.

Mr. WILLIAM CONNOLLY,
Communications Representative,
Michigan Bell Telephone Co.,
Grand Rapids, Mich.

DEAR MR. CONNOLLY: This is to confirm our telephone conversation of this morning regarding Calvin College and Seminary.

You indicated that your company would not provide Toll Terminals for Student Residence service on a non-bill basis, therefore, would you please provide Toll Terminal service terminated at Bolt-Heys Hall on your billed basis. We will require 5 CET, 1 way Toll Terminals, to be installed at Bolt-Heys Hall, Calvin Campus.

Please coordinate our request for that installation with the August 14th date in our June 23rd. letter to you regarding dormitory trunks.

Further, would you please provide me with your formal policy regarding the denial of our request for the non-bill Toll Terminals.

I would appreciate the answer prior to September 1, 1972.

Thank you for your cooperation.

Sincerely yours,

DEAN W. SWITZER,
Vice President.

Exhibit 28

MICHIGAN BELL,
Grand Rapids, Mich., July 25, 1972.

Mr. DEAN SWITZER,
Vice President,
TPI, Inc.,
Grand Rapids, Mich.

DEAR MR. SWITZER: This is in reply to your letter dated July 21, 1972 regarding Toll Terminals for Calvin College, Grand Rapids.

We have ordered the five Toll Terminals you requested. The monthly rate for each is \$4.45 plus a \$6.00 per month charge for each interface unit. In addition there is a \$10.00 non-recurring charge for each Toll Terminal and each interface unit. The total monthly rate will be \$22.25, with a non-recurring charge of \$100.00.

Per Tariff 3, in the interest of an efficient toll service for the public certain types of toll terminals are provided without charge. Since the toll terminals you have ordered for Calvin College do not fall in this category we are providing them on a billed basis as quoted above.

If you have further questions please call me on 459-9868.

Sincerely,

C. L. WYBICK,
Sales Manager.

Exhibit 29

DEPARTMENT OF COMMERCE,
Lansing, Mich., August 18, 1972.

Mr. DONALD V. McKERSIE,
President,
TPI Inc.,
Grand Rapids, Mich.

DEAR MR. McKERSIE: This is in response to your letters of May 31, 1972, concerning charges for interconnect devices on off-premise extensions, of June 1, 1972, concerning dormitory PBX trunk rates at Ferris State College, and of June 2, 1972, concerning interface rates for a customer-owned centrex system.

We have discussed the above three items with the Michigan Bell Telephone Company. In its response, the telephone company pointed out that an off-premise extension to a customer-provided PBX system, as discussed in your May 31 letter, is usually bridged through the central office. Because of this bridging arrangement, the off-premise station has access directly to the DDD network without passing through the interface contained at the customers main PBX location. Consequently, an interface device is required.

Your June 1 letter concerned classification of service at dormitories. At present the only residence service offered by Michigan Bell is in connection with Centrex C.O. service. In the case of a dormitory served by such a centrex system, the rate for residence stations is 20¢ under the 1-party residence flat rate offering in that area. Michigan Bell states it has no plan at the present time for providing a special trunk rate for dormitory PBXs. The trunk rate is the same regardless of whether Michigan Bell provides the station equipment or an outside supplier such as yourself provides it.

Concerning finally your question of a connecting arrangement for a customer-provided centrex system, Michigan Bell states that connecting arrangement hardware is currently under study but that until the studies are completed and ratemaking data finalized no rate quotes may be made. We will continue to work with Michigan Bell toward finalizing those rates.

We believe this should answer your questions.

Yours very truly,

F. M. HOPPE.

Exhibit 30

MICHIGAN BELL,
Grand Rapids, Mich., October 26, 1972.

Mr. DEAN W. SWITZER,
TPI, Inc.,
Grand Rapids, Mich.

DEAR MR. SWITZER: This is in regards to your letter dated September 21, 1972 on Calvin College Centrex interconnection rates.

In our telephone conversation on September 22, I told you I would give you a status report by October 30. Although I do not have a firm answer at this time, I do expect to receive the required rates during the week of October 30, 1972.

As soon as they are received I will call you and then formalize the information in writing.

Sincerely,

C. L. WYRICK,
Sales Manager.

Exhibit 31

State of Michigan. Proceedings before the State Public Service Commission

TPI INCORPORATED, COMPLAINANT

vs.

MICHIGAN BELL TELEPHONE CO., RESPONDENT

COMPLAINT AND PETITION FOR HEARING

NOW COMES TPI Incorporated and presents this Petition and its Complaint against Michigan Bell Telephone Co. as follows:

COUNT I

1. TPI Incorporated (hereinafter Complainant") is a Michigan corporation with its principal office at 5740 Foremost Drive, S.E., Grand Rapids, Michigan.

2. Michigan Bell Telephone Co. (hereinafter "Respondent") is a Michigan corporation with its principal offices located at Detroit, Michigan, and with business offices throughout the State of Michigan.

3. Complainant is engaged in the design, sale, installation and maintenance of telephone communication equipment and systems to private purchasers throughout the State of Michigan. Telephone systems and equipment sold by Complainant, known as "customer provided equipment", is then interconnected to the Bell system telephone communications message network.

4. The customer provided telephone systems and equipment sold by Complainant to private customers can be interconnected to the Bell message network only by the use of certain equipment provided by respondent or its affiliate called a "connecting arrangement". The term connecting arrangement is defined at Michigan Bell Telephone Co. Tariff M.P.S.C. No. 7, Third Revised Sheet 5, as follows:

"The term 'Connecting Arrangement' denotes the equipment provided by the Telephone Company to accomplish the direct electrical connection of customer-provided facilities with the facilities of the Telephone Company, or the direct electrical connection of Telephone Company facilities."

Connecting arrangement equipment is commonly known as an "interface" or "interface device." Again, respondent, or its affiliate, is the only source of such equipment.

5. Present Michigan Bell Telephone Co. M.P.S.C. Tariffs require the use of an interface device where the customer-provided equipment is interconnected with the respondent's message or DDD network, however, there are presently no standard tariff rates nor rate requirements set for all such connecting arrangement (interface) devices which may be required of the Complainant's customers when they interconnect competitive equipment.

6. Since approximately the early part of 1969, Complainant has requested that respondent provide it with standard rate quotations for interconnecting competing customer-provided telephone equipment systems, including trunk rates and interface rates for customer-provided Centrex systems.

7. Beginning in 1969 and since that time, Complainant has sought to compete with respondent in selling customer-provided Centrex telephone equipment and systems to customers in the public market place.

8. One of Complainant's first prospective customers for a Centrex system was Calvin College, located in Grand Rapids, Michigan. In connection with quoting that system's cost to the customer, Complainant requested a quotation from respondent for Centrex interconnection (trunk and interface) rates and in particular for Centrex interface rates. That request was not and has not been met and Complainant is unable to apprise this potential customer, as well as others, of the total costs of interconnection.

9. In November of 1970, Complainant presented a proposal for a privately owned Centrex telephone service system to Ferris State College, of Big Rapids, Michigan. Again, the Complainant asked Respondent for a quotation of interconnect rates in connection with this proposal and was not, and to date has not been given a rate quotation.

10. In connection with the proposal to the second college, Complainant provided a quotation of estimated figures for interconnection rates based on a competitive proposal made by respondent to Complainant's original quote to the Grand Rapids area college, that competitive proposal having detailed the interconnection rates which respondent believed then to apply to Complainant's equipment interconnect. Thereafter, the Respondent informed Ferris State College that the approximated interconnection rates were not available as quoted in Respondent's competitive bid, that in fact they were likely to be higher, and refused again to provide a firm quotation of rates.

11. Following the proposal to Ferris State College and the events set forth at Paragraph 10, Respondent made a competitive proposal to said colleges again estimating interconnection rates both higher than the Respondent's first competitive bid to Calvin College and higher than the rates estimated by Complainant in its proposal to Ferris State College.

12. In approximately April of 1971 Complainant began preparation to present a proposal for a privately-owned Centrex telephone service system to St. Mary's Hospital of Grand Rapids, Michigan. Through 1971 and into 1972, discussions were had with St. Mary's and Complainant did present a proposal which again estimated interconnection rates based upon the competitive proposal made by respondent at Ferris State College wherein Respondent again estimated interconnect rates at a higher cost than previously estimated.

13. Complainant and St. Mary's Hospital were subsequently informed that the estimated rates, based upon Respondent's prior competitive proposals, would not be available and that when Respondent filed for a tariff to establish Centrex interface and trunk rates, they would be substantially higher than the estimates presented by Complainant.

14. Complainant then informed St. Mary's Hospital of the change and was unable to conclude a contract with that potential customer following the change in costs estimated from the original proposal.

15. Respondent has obtained a tariff which requires the use of the connecting arrangement or interface on privately owned, customer-provided telephone systems, including Centrex systems, which are sold by Complainant. However, Respondent has refused to obtain even an interim tariff to set a rate for the Centrex interface despite the repeated requests of Complainant. Respondent's position is that it will not seek a rate for the Centrex interface until it receives a formal interconnection request from a customer who has purchased one (Exhibit 1).

16. Respondent's failure to obtain an approved tariff rate for the Centrex interface, although it has obtained a tariff requiring such device, as well as its failure to quote even a suggested trunk and interface rate upon which Complainant can rely, has excluded Complainant from a substantial telephone systems customer market. A customer must have 150-250 telephones to qualify for various Centrex operations according to the tariff approved by the M.P.S.C. for Respondent and, because Complainant is unable to quote even estimated rates and because where Complainant attempts to quote such rates Respondent invariably raises its own estimates, thereby giving the appearance that Complainant is stifled by incompetents at best or liars at worst, Respondent has succeeded in stifling competition from Complainant, rendering it unable to compete in Centrex sales. Respondents' insistence that it will not quote rates until a customer has purchased a Centrex is a sham since Complainant cannot sell a Centrex if it cannot accurately quote rates.

17. Respondent's actions in failing to apply for Centrex interface and trunk rates, refusing to quote suggested rates, in changing its own estimates by always revising them upward after Complainant relied on Respondent's own competitive quote estimates, in its actions with respect to Complainant's quoted jobs by telling potential customers that Complainant cannot have rates previously estimated, are deliberate and intentional attempts by Respondent and its agents to protect and preserve the Centrex market from fair and open competition, brought about by the present tariff requiring interfaces without setting rates therefor, all to the damage of Complainant and to the public customers in the State of Michigan.

18. As a consequence of Complainant's repeated protests, Respondent agreed in 1972 to obtain firm commitments as to required rates on the Calvin College Centrex but to this time it has failed to do so and there continues to be an effective exclusion of competition from this market.

19. Complainant specifically alleges that there is no justification for Respondent's failure to apply for an interconnect trunk and interface rate or to agree on estimated interconnect rates. All costs are known to Respondent or are readily available to it. Complainant has not asked for a specific rate but only a rate to quote to its customers so it can compete with knowledge that its quotes will not be upset.

20. Complainant specifically alleges that the equipment which it sells is manufactured to the standards required by the Bell System so that as to it, interfaces are unnecessary and should be eliminated, since their only purpose is to stifle competition presented by Complainant.

WHEREFORE Complainant prays that this Commission order Respondent to cease and desist its unlawful practices, and to provide Complainant immediately with standard Centrex interface and trunk rates and to join Complainant in obtaining a tariff approval for reasonable Centrex interconnection rates, and to order the elimination of connecting arrangement devices on equipment sold by Complainant.

COUNT II

21-26. Complainant realleges and adopts by reference the allegations of Paragraphs 1-6 of Count I.

27. In early 1972, Complainant quoted systems prices to a customer for privately owned equipment which included an off-premise extension to a customer-provided PBX system. Following its quotation to the customer, Complainant was informed by Respondent that not only would there be an interface required at the customer's main PBX location, but that an interface was required at the off-premise station as well, the net effect being a double interface charge on the same telephone system.

28. Respondent's rationale for the double interface charge was that the off-premise extension was usually bridged through a second central office and therefore, the off-premise station would have access to the DDD network without passing through the interface contained at the customer's main PBX location.

29. Complainant asserts that the rationale set forth by Respondent is not accurate and is inapplicable to Complainant's proposed systems. Complainant has always proposed that the standard voice grade circuit required for the off-premise station be channeled directly through the PBX main location. It is absolutely unnecessary to bridge the off-premise extension through the central office or through a second central office where two are located in the same * * *.

* * * * *

Exhibit 32

MICHIGAN BELL,
MARKETING DEPARTMENT,
Wyoming, Mich., February 13, 1973.

Mr. H. DEWITT,
Vice President, Finance,
Calvin College,
Grand Rapids, Mich.

DEAR MR. DEWITT: This is to confirm our conversation of February 12, 1973.

It is our understanding that you want us to deal directly with TPI, Incorporated in all matters pertaining to your telephone system. As your agent they

will be authorized to make additions, deletions, and arrangements affecting your billing.

With your concurrence below we will use this letter as authorization to deal directly with TPI until you give us further notice.

Please sign and return the original to me, a copy is enclosed.

If you have any questions please call me on 538-0596.

Sincerely,

C. L. WYRICK,
Sales Manager.

MICHIGAN BELL,
Detroit, Mich., March 30, 1973.

Mr. JOHN R. NICHOLS,
Attorney at Law,
Law, Buchen, Weathers, Richardson & Dutcher,
Grand Rapids, Mich.

DEAR MR. NICHOLS: This will confirm our discussion in your office on March 27, 1973, concerning our proposed charges applicable for the provision of Centrex CU features (AIOD and DID) on trunks which terminate in a customer-provided PBX. Charges shown below are quoted under the provisions of Tariff MPSC No. 2, Original Sheet 100, SPECIAL EQUIPMENT AND ARRANGEMENTS.

As I indicated at the meeting, we will file Tariffs containing those charges as soon as our workload permits, but in any event prior to the time the initial service is placed in operation.

These charges will apply for service provided in all central offices where facility conditions permit offering this arrangement. These include No. 1ESS, No. 5 X Bar (with some exceptions) and large Step-by-Step central offices.

CENTREX CU FEATURES WITH CUSTOMER-PROVIDED PBX

Central office facilities	Monthly	Basic termination charge
Basic charge includes first 100 station numbers and 10 outgoing trunks.....	\$875	(1)
Additional outgoing trunks, each.....	15	(1)
Additional station numbers, each 100.....	25	(1)

¹ Minimum contract period for the service is 5 years. The termination charge shall be an amount equal to 50 percent of the unbilled charges for the unexpired portion of the contract period.

Other charges	Nonrecurring charge	Monthly charge
Data link—one per system.....	\$10	¹ \$5.60
Connecting arrangement—one per data link (C-25).....	10	² 9.50
Voice connecting arrangement (C-22) per incoming trunk.....	10	³ 4.25
Voice connecting arrangement (C08) per outgoing trunk.....	10	16.00
Tone type address signaling, per central office line or trunk.....	10	12.25
Toll diversion—customer provided restriction.....	(1)	
Student toll dialing.....	(1)	

¹ Established tariff rates.

² Rates will be filed.

³ Choice of customer-provided restriction or MBT type I, limited to where central office facilities are available. NBT toll restriction wired to customer PBX not offered. Individual station restriction cannot be provided.

⁴ Provided at tariff rates (20 cents/bill) subject to administrative regulations including restriction of individual stations to enforce denial of toll service for nonpayment.

The above rates are in addition to rates and charges for other services or facilities with which this service is associated, including business trunk rates (residence trunk rates for trunks serving dormitory stations).

In the case of Calvin College, service could be provided twelve months after receipt of a firm order. As I indicated at our meeting, this interval is appropriate only for Calvin College and the interval for any other service would depend on the circumstances peculiar to that installation.

If either you or Mr. McKersie have any questions on the foregoing, please give me a call.

Sincerely,

H. E. Gwillim,
Assistant Vice President.

Exhibit 34

LAW, BUCHEN, WEATHERS, RICHARDSON & DUTCHER,
ATTORNEYS AND COUNSELORS,
Grand Rapids, Mich., April 27, 1973.

Re TPI incorporated v. Michigan Bell Telephone Company, Case No. U-4287.
Ms. MARY CONRAD,
Legal Department,
Michigan Bell Telephone Co.,
Detroit, Mich.

GENTLEMEN: As Wayne Wells will tell you, our delay in responding to the matters discussed at the March 27 meeting in our office is due primarily to our involvement in the rate case.

As we mentioned at the meeting, we were concerned that Michigan Bell's fixed rate schedule for Centrex interconnection charges did not include a break-out of DID and AIOD charges. Although we realize that our complaint was only directed at Bell's refusal to quote a fixed rate which you have now furnished to us in writing, we assumed, apparently erroneously, that the rates we would be given would include this break-out since Bell's previous written and oral "estimates" to TPI's prospective customers had been made in this manner.

As we indicated to you at the meeting, the equipment sold by TPI has the capability of supplying the AIOD feature and therefore we would want to have the option of furnishing this feature ourselves. Ironically, this capability was developed for us by the manufacturer because of our inability to obtain fixed rates from Bell. Therefore, this letter will serve as our client's request that Michigan Bell provided a fixed rate break-out for AIOD on a customer provided Centrex CU.

It is our understanding that Michigan Bell intends to file a tariff application this year incorporating therein the rates established by Mr. Gwillim's letter to us of March 30. We would appreciate your advising us in writing as to the outside date for filing this tariff and whether you will include therein a separate break-out rate for AIOD. Although we have some rather serious reservations as to the rates quoted by Mr. Gwillim, we would agree to raise our questions in this regard at the time of your tariff filing unless of course Michigan Bell would be willing to discuss this informally prior to that time. However, assuming that the timetable for filing the tariff is acceptable to our client and that Michigan Bell will agree to include a separate AIOD rate in the tariff, we are willing to dismiss the first count of our complaint at this time.

With respect to Mr. Gwillim's letter of April 13, we make the following comments:

Interface Installation Intervals—We assume that although the letter referred only to CD9's and CDH's, your two-week delivery interval will continue to apply to all interface devices. As we had indicated, our primary problems were related to CD9's and CDH's and STC's and perhaps that is why Mr. Gwillim limited his comments to these two. We just want to make sure there is no misunderstanding on this matter as our client will rely on this commitment in quoting installation dates.

There is one further problem relating to delivery intervals which Don McKersie referred to at the March 27 meeting. This is, in the area of adding lines for existing customers (as opposed to new customers) of TPI. Our client's position is that it should be able to meet the same delivery date for installation of an interface device associated with the new lines for an existing TPI customer, as Michigan Bell would meet for its own customers. It is certainly agreeable to have a two-week delivery interval on the interface devices for new installations. However, a customer with an existing installation wants as prompt service in the order and installation of the new line as can be achieved with such an order to Michigan Bell. If we are required to wait

for a two-week delivery on interface devices in supplying new lines to the existing customers, this is both an inconvenience to the customer and a continuing problem for the company.

Consequently, we would ask that for the smaller volume of orders associated with adding lines to existing TPI customers, we receive assurances that we can meet the same delivery dates for installation of the interface device associated with such new line as Bell would meet for its own customers. If this cannot be assured, then there continues to exist a temptation for Bell marketing people to utilize this installation differential to Bell's advantage in competing for the initial sale of the system. Based on Mr. Schuler's indication to me in another matter that Bell cannot always control the anticompetitive tactics of the market personnel, we would want this insurance in writing in order to eliminate this potential weapon from Bell's competitive arsenal.

Off-Premise Extension Stations—This is the one area of our complaint where we still have a substantial disagreement with your people. We still can not accept the position that an off-premise extension station has to be bridged at the central office. We believe that your position in this regard is one based primarily on the present tariff which you admit was established many years ago when the concept of interconnect was a non-reality. We believe the problem of transmission, both with respect to off-premise extensions from key systems and off-premise stations from PBX systems, results from a breakdown in communications between our respective engineering people as to exactly what we are installing and how our system will be used.

We would therefore propose that the hearing on Count II of our Complaint be held temporarily in abeyance if your engineering people are willing to meet with our client's people to discuss the mutual problems involved in this area of leased circuits and to work together to devise the means or procedures for overcoming these problems. If you are agreeable to taking this approach, would you have someone contact Mr. Jack Kruger or Mr. Dean Switzer of TPI to set up the initial meeting. They can be reached at 616-949-4220.

I should point out that although we do not question Mr. Gwillim's sincerity in his indication that a study is now being conducted to determine if a revision in Tariff 15 is possible, we are rather doubtful when it comes to the time schedule for completing this study in view of the problems we encountered with respect to the Centrex interconnection rate study which presumably began in 1969. Therefore, we do not feel that we can just drop the matter by indicating our willingness to wait until the study has been completed. Instead, to insure that some priority is being given to this problem, we propose the joint engineering study group approach mentioned above.

Secretarial Answering Service Interface Device. Although we can appreciate and accept your position that a multiple line interface device has not yet been developed and therefore cannot be offered, we cannot accept the conclusion that TPI must continue to use the interface for each of its own customers or the customers of its potential answering service customers. To do so would be an admission that Michigan Bell has the right to exclude TPI or other interconnect companies from the telephone answering service market since the exorbitant cost of multiple interface devices effectively excludes any interconnect company from competing in this market. This we believe is contrary to the spirit and intent of the *Carterphone* decision. We do believe there is an alternative that could be used to resolve this problem temporarily and that would be to establish a one-time non-recurring charge for interface devices associated with telephone answering service equipment. Will Michigan Bell agree to this alternative and, if so, what rate would you propose to establish?

Mr. Gwillim's indication that Michigan Bell intends within the next 30-60 days to provide a single contact for activities involving the interconnect industry will be well accepted by us and by our client. Our client has been confronted with continued frustration ever since it entered this business because it has had to deal with Michigan Bell's marketing personnel in trying to resolve problems related to the utility aspect of your business.

One final point which was raised at the March 27 meeting and which we want to re-emphasize here is our complete dissatisfaction with Michigan Bell's position that it will only deal directly with the customer and not with TPI on customer matters. We originally referred to this in connection with TPI's efforts to obtain Centrex quotes on behalf of its prospective customers. We

now find that there are equally serious problems in connection with trouble calls made to your plant personnel by TPI on behalf of its customers and where a Bell repairman responds to the call.

Following such calls, TPI is unable to obtain information as to the nature of the problem, what was done to correct it, and whether the origin of the repair call was in Bell equipment or in TPI equipment. Instead, Bell merely bills the customer for the repair call and when the customer calls TPI to find out what the charge was for, they are unable to determine the answer to such questions.

This becomes particularly important because we have determined that in some cases the customer is charged for the repair call and in some cases he is not. When the Bell repairman reports that the "trouble comes clear" we have no way of determining whether the trouble was cleared by itself, whether it is trouble with Bell equipment in the central office or along the transmission lines, or whether it originated from the customer-provided equipment. As we read the applicable tariffs, a service charge would be made where the trouble originates from interconnected equipment but that such charges are not to be made where the trouble originates from the Bell Telephone portion of the system (see, MPSC Tariff 2, Sheet 89, Fifth Revised Sheet, effective 4/29/72). As you can see, when TPI customers are charged for repair calls and we are unable to provide them with answers as to the source of the trouble and when they are apparently charged in cases where "trouble comes clear" and in other cases under the same circumstances are not charged, we can encounter serious difficulties.

Accordingly, we ask that you advise us of the policies set by Bell where the trouble clears by itself. Will there be a charge or not? Will you agree to tell us the source of the problem and the criteria for charging the customer? We would only suggest that our client be notified by your plant people as to the nature of the problem and the corrective action taken.

Only by working together can these problems be resolved and knowing what caused the problem and how it was corrected would be of great benefit to an interconnect company in devising ways to avoid the problem in the future. We ask Michigan Bell to work directly with TPI in resolving these technical problems as they arise and for Bell to withdraw the policy of dealing only with the customer where an interconnect company is directly involved.

As you can see from the foregoing comments, as well as from the complaint filed by TPI in this cause, most of the problems between TPI and Michigan Bell arise out of a common denominator which is the interface device. The problems of delivery schedules, rates, off-premise extensions, the secretarial answering service, and our competition problems, lead directly from the interface requirements. We believe that there are several steps that could be taken with respect to the interface which will adequately protect the Bell System while permitting the interconnect companies to be viable entities in modern commerce. As an example, a one-time charge for the interface device on the telephone answering service would permit entry into this field, yet would permit the Bell System to recover the cost of its device with a fair profit. Maintenance of the interface or factored into one time can be continued by the normal service charges of the Bell System. Another example that comes to mind is with respect to delivery intervals for existing customers on new lines. If the interconnect company were permitted to purchase and stockpile a small number of interfaces to meet the demands for additional service, the customer would benefit. Carefully controlled experiments regarding the elimination of interfaces on hard wired extensions or on telephone answering boards would go far toward providing both the Bell System and the interconnect companies with information necessary to bring about adequate engineering resolutions of network connection problems.

Innovative attempts at resolving the problems between interconnect companies and the Bell System will have their greatest effect in reducing the points of friction between the parties. The filing of complaints and direct confrontations to bring about resolutions to the problems can and should be eliminated. We ask that Michigan Bell seriously consider these requests and continue to work with us in attempting to resolve our differences.

Very truly yours,

JOHN R. NICHOLS.
GARY P. SCHENK.

Exhibit 35

LAW, BUCHEN, WEATHERS, RICHARDSON & DUTCHER,
ATTORNEYS AND COUNSELORS,
Grand Rapids, Mich., April 19, 1974.

Re TPI incorporated vs. Michigan Bell Telephone Company—Case No. U-4287
Ms. MARY M. CONRAD,
Michigan Bell Telephone Co.,
Detroit, Mich.

DEAR MS. CONRAD: It has now been over a year since we met in our offices to discuss the above matter. To date, no tariff application has been filed with regard to centrex interconnection rates. Hal Gwillim's letter of March 30, 1973, indicated that the tariff would be filed "as soon as our work load permits," and from subsequent conversations with him and with Wayne Wells I was led to believe that this would occur as soon as the last rate case was completed, hopefully during 1973.

I hate to accuse Michigan Bell of again dragging its feet in another area of competition, but I can think of no excuse for the over one year delay in doing what we were advised would be done at our March 27, 1973, meeting. The delay is particularly inexcusable when you consider that TPI still has not obtained what it has been trying to obtain since 1969, namely, tariff rates for interconnection of privately owned centrex systems. The fact that we finally received "proposed" charges on March 30, 1973, as a result of our MPSC Complaint or that TPI has not yet installed a centrex system is not relevant in our opinion. To effectively compete in the centrex area, TPI and other interconnect companies must be able to rely on established tariff rates. They have not had these since 1969 despite all of the promises given by the numerous employees of Michigan Bell who from time to time have been involved in this matter. Furthermore, we have never received a breakout rate for AIOD and DID which was not covered by Hal Gwillim's March 30, 1973, letter, but which you indicated in your May 24, 1973, letter would be covered by the tariff application that we are still waiting to receive.

Will the centrex interconnect rates be covered by your soon to be filed general rate application? If so, when will this application be filed? If not, when do you intend to file for centrex interconnection rates?

Very truly yours,

JOHN R. NICHOLS.

Exhibit 36

FOCUS ON COMPETITION IN MICHIGAN BELL
POTENTIAL DEVELOPMENTS FROM THE LABS

Bell Telephone Labs has asked a number of the Operating Companies to suggest and evaluate new applications and/or features offered or planned by our competitors and not now available through the Bell System. We are also providing feature-by-feature evaluation by market segment. All this, in order to provide a marketplace perspective needed in planning future customer switching systems and the relative marketability of features. We can expect some relief in these areas in the way of more competitively designed apparatus, now that BTL has begun asking questions.

"LOW COST" MAINTENANCE

Pacific Tel tells us that recently, one of its customers who has had a non-Bell PABX in long enough to get his second maintenance contract got a real shock. He has a system consisting of 150 lines. His first maintenance contract was \$75 per month (50¢ per line). His new contract is \$280 per month (\$1.87 per line)!

MORE GRIST FOR THE MILL

One of our Royal Oak business customers recently received this answer to his question on costs of future additions and moves if he purchased from United Business Communications:

"The installed purchase price for a desk telephone is \$95. The purchase of a installed 6-button telephone set is \$195. Moves of telephones are handled on a time and material basis. The rate is \$20 per hour (portal-to-portal) with a minimum call set at \$40."

That's a bunch more than current MBT charges for a move.

WATS 21 ET AL.

Several devices now being promoted with the general public for use with telephone lines are becoming increasingly popular. 21st Century Communications Consultants market the WATS 21 and PATCH 21. Com-U-Trol Corporation manufactures EXTENDA WATS and Diverta-Call—each of these is being vended in Michigan. We can provide interconnection units for these. A.T.&T. reports that the WATS BOX is also available in some areas. This device is *not* compatible with any interface we currently supply.

We'd like to know if you encounter or receive inquiries about other devices such as these so that we can track on the types of new developments being made available to our customers as well as to determine whether we can provide appropriate interfaces.

MUSICAL CHAIRS

If you have any question about Bruce Mahar's relationship with Arcata at this point in time, the following communication was received by MBT from the Arcata Regional Manager:

"Arcata Communications is not nor has not in any way been associated with National Telecommunications. They are not a subsidiary nor do we do any installation work for them. I might also add that as of May 17, 1972, Bruce Mahar terminated his employment with Arcata Communications."

As you might gather, Bruce is now affiliated with his own firm—National Telecommunications. He's also vending Nitsuko Key Systems. Arcata's new custom key line.

DISCRETION CALLED FOR IN SUBMITTING EARLY BID

A critical look should be taken at the time and costs involved in preparing and presenting so thorough an analysis of the customers' communications needs that it provides the competitor with his groundwork laid for him. For example, Michigan Bank, Detroit, tells us that an outside consulting firm would collect a \$4,000 fee for a Centrex study. If requested by the customer to present an earlier analysis and bid than the competition, the competitor may then be allowed to study our proposal, capitalize on our efforts, undercut our prices, and, win our customer.

DATA TRANSMISSION NEEDS

Be alert to customers' data transmission needs. Interfaces for Key and PBX do not permit data signals to be transmitted. If a customer is considering private equipment, the requirement for data transmission can be a point in our favor competitively.

DON'T EMOTE

Contacts with representatives of the press (radio, TV, newspapers, trade publications, etc.) should only be through our local press relations people—Public Relations or Information departments.

"Interconnection's" John Reason has been calling a number of Bell people and has been referred all around the System. The probability of misunderstanding, misquoting, and consequent embarrassment to the Company is high unless PIR is involved and the appropriate sign-offs obtained before publication.

SOME QUESTIONS AND ANSWERS ON TAX MATTERS

We went to our tax people in order to get some answers to questions that you have been asking about tax applications to competitive equipment. We hope that you will find the following information useful in evaluating proposals or discussing tax applications with the customer.

Q. When communications equipment is leased by a customer from another vendor, does the Michigan use tax apply? To whom—customer or vendor?

A. The Michigan 4% use tax applies unless the customer is exempt from sales & use tax. The vendor is responsible to remit the tax; both are responsible until the tax is paid.

Q. If the equipment is on a lease with option to buy or to continue the lease, does use tax or sales tax apply?

A. The 4% use tax applies unless the customer is exempt from sales and use tax.

Q. On a conditional sales agreement; e.g. Y dollars for X years with nominal payment at the end of the period and title to the equipment passes to the customer, does the use or sales tax apply and when?

A. On conditional sales agreements, viz., customer to buy the equipment at a reduced price on a later date, the 4% use tax applies to all lease payments unless the customer is exempt from sales and use tax. The 4% sales tax applies to the selling price, as stated by the seller, when the customer assumes ownership, unless the customer is exempt.

Q. Does personal property tax apply to equipment under a lease purchase agreement? If so, when?

A. The personal property tax applies under a lease-purchase agreement.

a. The vendor is responsible while he is the owner. The usual arrangement is that the customer agrees to pay the tax, under terms of the lease agreement. The vendor may render separate billing, over and above the regular lease payments or he may include the tax amount as an incremental part of the lease payments.

NOTE. When MBT furnishes the service, the customer pays no personal property tax to the State; our equipment is not on local tax rolls.

b. After transfer of ownership, the customer becomes responsible for this tax, and it is computed on the depreciated value of the equipment.

Question. Does property tax apply on equipment under a lease agreement? If so, who is responsible—vendor or customer?

Answer. The personal property tax applies to equipment under lease agreement. The vendor, as the owner, is responsible for this tax, but it is usually handled as covered in item a above.

Question. The business development tax credit is being used by vendors of communications equipment to emphasize the desirability of utilizing private equipment. We question if the tax credit applies in all situations; e.g. lease, lease-purchase, purchase; and, if so, what is the proper percent application?

Answer. Business development tax credit.

a. Applies only in case of new equipment.

Re-used equipment is excluded. The following table shows how the tax credit is determined both for purchases and for leases:

<i>Estimated useful life</i>	<i>Tax credit allowed (see note)</i>
3 to 4 years-----	$4\% \times \frac{1}{3}$ of the fair market value.
5 to 6 years-----	$4\% \times \frac{2}{3}$ of the fair market value.
7 or more years-----	$4\% \times \frac{3}{3}$ of the fair market value.

b. With one exception, the tax credit is allowed in all cases of purchases. Foreign made equipment in excess of \$500 per unit and ordered during the wage-price freeze period (8-17-71 to 12-20-71) is not eligible for the tax credit.

c. It may or may not apply in the case of leases or lease-buy arrangements. The law allows either the vendor or the customer to take the tax credit; it is usually a bargainable item and it is believed that in most cases the tax credit is passed on to the customer.

d. The law does not require that the life of leases coincide with the "Estimated Useful Life" of the equipment. This makes no difference if the vendor has taken the tax credit. However, if the customer has taken the tax credit he should be aware that if any lease is terminated before expiration of the Estimated Useful Life he must apply a tax debit to offset some of the credit taken earlier. To illustrate, referring to the table above:

If the equipment were leased under a 7 year life category (100% of the tax credit taken) and the lease terminated in 5 years (qualifying for only $\frac{2}{3}$ of the credit) the customer must pay back the difference ($4\% \times \frac{1}{3}$ of the Fair Market value).

e. The Telephone Company does not pass along investment credit. We are selling service only; the customer has no control over the equipment.

NOTE. The 4% rate applies to all purchases of telephone equipment, as opposed to a 7% rate for other equipment.

If you have any further questions on tax matters, please call us, we'll pursue the answers—(313) 883-9900, ext. 426 or 442.

Exhibit 37

* * * and insurance. One of the common ways of achieving a favorable picture of cost savings for the purchase of an interconnect system is for the competitor to neglect the cost of money when making his comparison. Another ploy widely used by our competitors is that of projecting a high percentage of annual rate increases for Southern Bell, such as 4% while holding the cost for his system stable.

Probably the most common way our competitors try to show inflated savings to the customer is for him to omit the cost of Bell interface devices or to tell the customer that they probably will not be required in a year or so. An instructive point in connection with this, is that most non-Bell PBX's are manufactured to work with interface devices and will not work without them unless expensive modification of the equipment is undertaken.

Just as at one time, most Southern Bell salesmen knew very little about finance, most non-Bell salesmen know very little at this time. This means that, in most cases, the competition will not be able to discuss the subject with any degree of authority in order to defend his cost analysis. On the other hand, we should know what we are talking about.

Exhibit 37A

* * * the difference between trunk charges and equipment charges. Also, this is the time to sell the customer on the fact that interface devices are a real cost that he must consider.

(3) *Non-Bell purchase price.*

The purchase price should be obtained even if the customer indicates he will not purchase the system outright, so that property tax, sales tax, insurance, etc. can be calculated.

(4) *Non-Bell sales tax.*

The customer should agree at this point on the sales tax rate, e.g., 4%.

(5) *Non-Bell down payment or installation charge.*

The customer should be questioned such items as possible security deposits and cost of Bell cable (this should be discouraged).

(6) *Total amount to be financed.*

At this point, distinguish between sales tax that will be either included in financing or paid in cash; also installation, down payment, security deposits, etc.

(7) *Number of years to be financed.*

This question leads into a discussion of the useful life of the system vs the finance period, and you should not let the customer assume more than 10 years for a PBX and 5 years for key equipment.

(8) *Annual finance rate (interest rate).*

Here you must get customer agreement. Try to get an indication of the way the customer feels about the current money market, remember that the customer may often think that he can borrow money more cheaply than he actually can. You might have some recent information from a local bank concerning the "prime" interest rate.

Exhibit 38

AUGUST 25, 1970.

Mr. E. F. GIETZEN,
District Sales Manager,
Michigan Bell Telephone Co.,
Grand Rapids, Mich.

DEAR MR. GIETZEN: This letter is in reply to your letter of August 17, 1970. For the most part your response is unacceptable.

Regarding the CD9 availability, I feel anything less than installation quoted intervals on your terminal gear is discriminatory. I would request that you provide me with the standard intervals for basic systems, e.g., key telephones, call directors, manual PBX dial PBX (100, 160, 200, 300), Centrex I & II.

Regarding the purchase of cable facilities, I find it difficult to believe you can order and install a call director system in two weeks yet it takes sixty days for a cable evaluation! I can understand that large complex systems could require the time you indicate, but I cannot accept a minimum of 60 days. Further, I would be interested in the maximum number of days.

Regarding the D.I.D. request, I should be pleased to discuss the requirements you indicate. However, I have not heard from any of your representatives as yet.

In our meeting with you and your staff personnel, we indicated the need for rapid coordination. Currently, we are expanding our operation throughout the State of Michigan. I trust that a greater effort can and will be made in resolving our interconnect requests.

Sincerely,

DEAN W. SWITZER,
Vice President,
Telephone Power, Inc.

Exhibit 39

MICHIGAN BELL,
MARKETING DEPARTMENT,
Grand Rapids, Mich., September 14, 1970.

Mr. D. V. McKERSIE,
President,
Telephone Power, Inc.,
Grand Rapids, Mich.

DEAR MR. McKERSIE: This is in reply to our conversation of September 11, 1970 regarding CD9 issue 2 interface units.

The monthly rate for each of these interface units is \$6.00 with a one-time charge of \$5.00 each for installation. In addition to these charges, are the normal charges for touch-tone calling and exchange service.

At this time, due to supply and demand, I cannot give you a definite delivery interval. Hopefully, we could supply this unit within 8 to 10 weeks.

As I have stated before, we will supply these interface units at your request, but we will not guarantee them to work with the equipment you want to interconnect.

If you have any questions, please call me on 459-9868.

Sincerely,

C. L. WYRICK,
Sales Manager.

Exhibit 40

MICHIGAN BELL,
MARKETING DEPARTMENT,
Grand Rapids, Mich., January 26, 1971.

Mr. DEAN SWITZER,
Telephone Power, Inc.,
Grand Rapids, Mich.

DEAR MR. SWITZER: In response to our telephone conversation of January 21, 1971, regarding the trunking and interface facilities for the customer owned telephone system; as you know when working with mechanical devices, delays may occur, but we will do everything possible to meet the due dates provided by you.

Sincerely,

GLEN PAWLOWSKI,
Sales Representative.

Exhibit 41

MICHIGAN BELL,
MARKETING DEPARTMENT,
Grand Rapids, Mich., December 30, 1971.

Mr. DEAN W. SWITZER,
Vice President,
TPI Inc.,
Grand Rapids, Mich.

DEAR MR. SWITZER: Your letter of December 23 asked that we stop the practice of sending letters to our customers who have contracted with your firm for interconnected equipment.

We cannot, in good faith, agree to this because the absence of a caution on a due date we have not agreed to would imply our consent to the date you establish.

As with any equipment or service MBT provides, we make every reasonable effort to meet a customer requested date. When this is not possible, it is our policy to inform the customer of our best estimate of when service can be expected. To do otherwise would be misleading and could cause customer operational problems in his own business.

As discussed previously with you and other members of your firm, the CD9 currently carries an approximate 30 day installation interval and STC's approximately six weeks. In our last meeting, we agreed to make every effort to improve those intervals, but in the meantime we would have to quote dates as stated above.

On that basis, we will continue cautioning our customers when shorter than quoted intervals are stated as expected cut-over dates.

Sincerely,

E. F. GIETZEN,
District Sales Manager.

Exhibit 42

TPI INC.,
Grand Rapids, Mich., January 3, 1972.

Mr. E. GIETZEN,
*District Sales Manager,
Michigan Bell Telephone Co.,
Grand Rapids, Mich.*

DEAR MR. GIETZEN: I have received your letter of December 30, 1971. Perhaps you misunderstood the purpose of my correspondence to you.

We have requested on many occasions that Michigan Bell provide interconnect companies with fair and non-discriminating installation intervals for interconnect devices when equipment users formally decide to purchase private equipment. I can only conclude from your answer that you have one set of rules for your sales representatives and another for the competition.

I believe we have been reasonable in our request for a fair policy from your company.

Sincerely yours,

DEAN W. SWITZER,
Vice President.

Exhibit 43

TPI INC.,
Grand Rapids, Mich., March 8, 1972.

Mr. G. J. FLAHERTY,
*Division Sales Manager,
Michigan Bell Telephone Co.,
Grand Rapids, Mich.*

DEAR MR. FLAHERTY: In a recent conversation with Mr. E. F. Gietzen, District Sales Manager, he indicated that your installation interval for Interface Units is still 30 days.

As, you know, we have formally requested that this interval be changed to conform with those dates you offer for a like service ie: 1-5 locations—1 week, over 5 locations—2 weeks. In the past, you have taken Interfaces from one job and installed them at another to meet a service date of less than 30 days. However, with the large number of jobs we are now installing even the 30 day interval is not being met.

In short, we feel that installation intervals for Interface Units must conform to the dates your salesmen quote for your services.

If this is not to be your policy, please advise us by March 15, 1972 so that we may take further action.

Sincerely,

DONALD V. MCKERSIE,
President.

Exhibit 44

MICHIGAN BELL,
MARKETING DEPARTMENT,
Grand Rapids, Mich., March 21, 1972.

Mr. DONALD V. MCKERSIE,
President,
Grand Rapids, Mich.

DEAR MR. MCKERSIE: This is to confirm our conversation of March 16, concerning installation intervals on interface equipment.

Because of the relative newness of these equipments and the continuing design changes, we are not in a position to make formal commitments for intervals shorter than those previously established, i.e., 30 days for CB9's and 6 weeks for STC's.

As you know, on many occasions we have installed interfaces in shorter intervals, and whenever possible, we will continue to do so, but ask that your people recognize the established intervals as their guide in coordinating cut-over dates.

Sincerely yours,

E. F. GIETZEN,
District Sales Manager.

Exhibit 45

DEPARTMENT OF COMMERCE,
Lansing, Mich., May 12, 1972.

Mr. DONALD MCKERSIE,
TPI, Inc.,
Grand Rapids, Mich.

DEAR MR. MCKERSIE: This is in response to your letters of April 4 and April 26, 1972, concerning alleged practices by Michigan Bell Telephone Company in the area of interconnection. In your letter of April 4, you questioned the lengthy delivery interval of certain interface devices needed by you when providing a customer with privately-owned telephone equipment.

In response to that charge the telephone company stated that due to the great variety of interface units used by the independent industry and the constantly changing types of connecting arrangements, interface units are not stocked by the telephone companies but are ordered from Western Electric as they are needed on a 30-day ordering interval. The telephone company further stated that most of the communication equipment it provides is, of course, in stock.

We have urged the telephone company not to use its delivery schedule versus a delivery schedule for interface equipment as a selling point for telephone company-provided intercommunication systems. It has agreed to instruct its marketing people along these lines.

In response to your letter of April 26, concerning irregular quotes by telephone marketing people, it is difficult to discuss with the company a specific case not knowing the customer's name or address. However, if quotes of 10-button sets without extension charges continue please notify us again. The corrective order has been issued and the revised tariff sheets have been filed.

Yours very truly,

F. M. HOPPE,
Director of Public Utilities.

Exhibit 46

MICHIGAN BELL,
MARKETING DEPARTMENT,
Grand Rapids, Mich., July 17, 1972.

Mr. W. A. SCHNEIDER,
Sales Engineer,
TPI, Inc.,
Grand Rapids, Mich.

DEAR MR. SCHNEIDER: I am in receipt of your letter of July 10, 1972 to Mr. E. F. Gietzen regarding your requested change from CD9 Interface Units to STC Interface Units for Ferris State College.

Our supply people tell me that the anticipated delivery time for these units is 6½ weeks. Every effort will be made to meet this interval.

Sincerely,

JOHN F. WALDON,
Communications Representative.

Exhibit 47

MAY 2, 1973.

Re TPI incorporated v. Michigan Bell Telephone Co. Case No. U-4287

MS. MARY CONRAD,
Legal Department,
Michigan Bell Telephone Co.,
Detroit, Mich.

GENTLEMEN: As Wayne Wells will tell you, our delay in responding to the matters discussed at the March 27 meeting in our office is due primarily to our involvement in the rate case.

As we mentioned at the meeting, we were concerned that Michigan Bell's fixed rate schedule for Centrex interconnection charges did not include a break-out of DID and AIOD charges. Although we realize that our complaint was only directed at Bell's refusal to quote a fixed rate which you have now furnished to us in writing, we assumed, apparently erroneously, that the rates we would be given would include this break-out, since Bell's previous written and oral "estimates" to TPI's prospective customers had been made in this manner.

As we also indicated to you at the meeting, the equipment sold by TPI has the capability of supplying the AIOD feature and therefore we would want to have the option of furnishing this feature ourselves. Ironically, this capability was developed for us by the manufacturer because of our inability to obtain fixed rates from Bell. Therefore, this letter will serve as our client's request that Michigan Bell provide a fixed rate break-out for AIOD on a customer-provided Centrex CU.

It is our understanding that Michigan Bell intends to file a tariff application this year incorporating therein the rates established by Mr. Gwillim's letter to us of March 30. We would appreciate your advising us in writing as to the outside date for filing this tariff and whether you will include therein a separate break-out rate for AIOD. Although we have some rather serious reservations as to the rates quoted by Mr. Gwillim, we would agree to raise our questions in this regard at the time of your tariff filing unless of course Michigan Bell would be willing to discuss this informally prior to that time. However, assuming that the timetable for filing the tariff is acceptable to our client and that Michigan Bell will agree to include a separate AIOD rate in the tariff, we are willing to dismiss the first count of our complaint at this time.

With respect to Mr. Gwillim's letter of April 13, we make the following comments:

Interface Installation Intervals.—We assume that although the letter referred only to CD9's and CDH's, your two-week delivery interval will continue to apply to all interface devices. As we had indicated, our primary problems were related to CD9's and CDM's and perhaps that is why Mr. Gwillim limited his comments to these two. We just want to make sure there is no misunderstanding on this matter as our client will rely on this commitment in quoting installation dates, including those for STC's, which are now being used more extensively.

There is one further problem relating to delivery intervals which Don McKersie referred to at the March 27 meeting. This is in the area of adding lines for existing customers (as opposed to new customers) of TPI. Our client's position is that it should be able to meet the same delivery date for installation of an interface device associated with the new lines for an existing TPI customer, as Michigan Bell would meet for its own customers. It is certainly agreeable to have a two-week delivery interval on the interface devices for new installations. However, a customer with an existing installation wants as prompt service in the order and installation of the new line as can be achieved with such an order to Michigan Bell. If we are required to wait for a two-week delivery on interface devices in supplying new lines to the

existing customers, this is both an inconvenience to the customer and a continuing problem for the company.

Consequently, we would ask that for the smaller volume of orders associated with adding lines to existing TPI customers, we receive assurance that we can meet the same delivery dates for installation of the interface device associated with such new line as Bell would meet for its own customers. If this cannot be assured, then there continues to exist a temptation for Bell marketing people to utilize this installation differential to Bell's advantage in competing for the initial sale of the system. Based on Mr. Schuler's indication to us in another matter that Bell cannot always control the anti-competitive tactics of the market personnel, we would want this insurance in writing in order to eliminate this potential weapon from Bell's competitive arsenal.

Off-Premise Extension Stations.—This is the one area of our complaint where we still have a substantial disagreement with your people. We still can not accept the position that an off-premise extension station has to be bridged at the central office. We believe that your position in this regard is one based primarily on the present tariff which you admit was established many years ago when the concept of interconnect was a non-reality. We believe the problem of transmission, both with respect to off-premise extensions from key systems and off-premise stations from PBX systems results from a breakdown in communications between our respective engineering people as to exactly what we are installing and how our system will be used.

We would therefore propose that the hearing on Count II of our Complaint be held temporarily in abeyance if your engineering people are willing to meet with our client's people to discuss the mutual problems involved in this area of leased circuits and to work together to devise means or procedures for overcoming these problems. If you are agreeable to taking this approach, would you have someone contact Mr. Jack Kruger or Mr. Dean Switzer of TPI to set up the initial meeting. They can be reached at 616-949-4220.

I should point out that although we do not question Mr. Gwillim's sincerity in his indication that a study is now being conducted to determine if a revision in Tariff 15 is possible, we are rather doubtful when it comes to the time schedule for completing this study in view of the problems we encountered with respect to the Centrex interconnection rate study which presumably began in 1969. Therefore, we do not feel that we can just drop the matter by indicating our willingness to wait until the study has been completed. Instead, to insure that some priority is being given to this problem, we propose the joint engineering study group approach mentioned above.

Secretarial Answering Service Interface Device.—Although we can appreciate and accept your position that a multiple line interface device has not yet been developed and therefore cannot be offered, we cannot accept the conclusion that TPI must continue to use the interface for each of its own customers or the customers of its potential answering service customers. To do so would be an admission that Michigan Bell has the right to exclude TPI or other interconnect companies from the telephone answering service market since the exorbitant cost of multiple interface devices effectively excludes any interconnect company from competing in this market. This we believe is contrary to the spirit and intent of the *Carterphone* decision. We do believe there is an alternative that could be used to resolve this problem temporarily and that would be to establish a one-time non-recurring charge for interface devices associated with telephone answering service equipment. Will Michigan Bell agree to this alternative and, if so, what rate would you propose to establish?

Mr. Gwillim's indication that Michigan Bell intends within the next 30-60 days to provide a single contact for activities involving the interconnect industry will be well accepted by us and by our client. Our client has been confronted with continued frustration ever since it entered this business because it has had to deal with Michigan Bell's marketing personnel in trying to resolve problems related to the utility aspect of your business.

One final point which was raised at the March 27 meeting and which we want to re-emphasize here is our complete dissatisfaction with Michigan Bell's position that it will only deal directly with the customer and not with TPI on customer matters. We originally referred to this in connection with TPI's efforts to obtain Centrex quotes on behalf of its prospective customers.

We now find that there are equally serious problems in connection with trouble calls made to your plant personnel by TPI on behalf of its customers and where a Bell repairman responds to the call.

Following such calls, TPI is unable to obtain information as to the nature of the problem, what was done to correct it, and whether the origin of the repair call was in Bell equipment or in TPI equipment. Instead, Bell merely bills the customer for the repair call and when the customer calls TPI to find out what the charge was for, they are unable to determine the answer to such questions.

This becomes particularly important because we have determined that in some cases the customer is charged for the repair call and in some cases he is not. When the Bell repairman reports that the "trouble comes clear" we have no way of determining whether the trouble was cleared by itself, whether it is trouble with Bell equipment in the central office or along the transmission lines, or whether it originated from the customer-provided equipment. As we read the applicable tariffs, a service charge would be made where the trouble originates from interconnected equipment but that such charges are not to be made where the trouble originates from the Bell Telephone portion of the system (see, MPSC Tariff 2, Sheet 89, Fifth Revised Sheet, effective 4/29/72). As you can see, when TPI customers are charged for repair calls and we are unable to provide them with answers as to the source of the trouble and when they are apparently charged in cases where "trouble comes clear" and in other cases under the same circumstances are not charged, we can encounter serious difficulties.

Accordingly, we ask that you advise us of the policies set by Bell where the trouble clears by itself. Will there be a charge or not? Will you agree to tell us the source of the problem and the criteria for charging the customer? We would strongly suggest that our client be notified by your plant people as to the nature of the problem and the corrective action taken.

Only by working together can these problems be resolved and knowing what caused the problem and how it was corrected would be of great benefit to an interconnect company in devising ways to avoid the problem in the future. We ask Michigan Bell to work directly with TPI in resolving these technical problems as they arise and for Bell to withdraw the policy of dealing only with the customer where an interconnect company is directly involved.

As you can see from the foregoing comments, as well as from the complaint filed by TPI in this cause, most of the problems between TPI and Michigan Bell arise out of a common denominator which is the interface device. The problems of delivery schedules, rates, off-premise extensions, the secretarial answering service, and our competition problems lead directly from the interface requirements. We believe that there are several steps that could be taken with respect to the interface which will adequately protect the Bell System while permitting the interconnect companies to be viable entities in modern commerce. As an example, a reasonable one-time charge for the interface device on the telephone answering service would permit entry into this field, yet would permit the Bell System to recover the cost of its device with a fair profit. Maintenance of the interface can be continued by the normal service charges of the Bell System or could be factored into the one-time non-recurring charge. Another example that comes to mind is with respect to delivery intervals for existing customers on new lines. If the interconnect company were permitted to purchase and stockpile a small number of interfaces to meet the demands for additional service, the customer would benefit. Carefully controlled experiments regarding the elimination of interfaces on hard wired extensions or on telephone answering boards would go far toward providing both the Bell System and the interconnect companies with information necessary to bring about adequate engineering resolutions of network connection problems.

Innovative attempts at resolving the problems between interconnect companies and the Bell System will have their greatest effect in reducing the points of friction between the parties. The filing of complaints and direct confrontations to bring about resolutions to the problems can and should be eliminated. We ask that Michigan Bell seriously consider these requests and continue to work with us in attempting to resolve our differences.

Very truly yours,

JOHN R. NICHOLS.
GARY P. SCHENK.

SEPTEMBER 26, 1972.

Mr. DAVE BARTZ,
Michigan Bell Telephone Co.,
Oak Park, Mich.

DEAR MR. BARTZ: Per our conversation, I am writing a letter depicting problems that we have suffered with Michigan Bell Telephone Company. I will only research the problems to the beginning of the year.

1. Tri-City Bank—Installed seven (7) of ten (10) interface ordered, ordered touch tone service from Southgate, neglected to inform us that there was no touch tone available in that office.

2. Huttenlocher—Changed lines in central office from loop start to ground start before due date. Repeated problems with bad cable. We had to vacate abandoned Michigan Bell cable in conduits.

3. Vlasic Foods—Repeated calls and letters to have cable removed.

4. Associated Midwest—We had to vacate abandoned Michigan Bell cable from conduits.

5. Central Heating—Missed installation date of 4/21 and several subsequent dates. Installed STC incorrectly 5/16, under the guidance of Michigan Bell we hardwired. On 5/19 Michigan Bell notified us that problems with interface were ours and we had 48 hours before we would be disconnected. We then made an appointment to meet with the Michigan Bell installer, his supervisor, and plant engineer to determine the problem. This is the only time to my knowledge that a test was done on any interface installed. The test to Michigan Bell's satisfaction proved the problem was ours. However, they did not make any voltage tests on the units. The input voltage was only 6 volts rather than 21 ± 5 volts DC required. Michigan Bell then corrected their problem.

6. A. J. Segal—Missed due date. Cut off Bell cable flush in conduit. Five (5) of six (6) STC worked on cut over.

7. Westheimer—Excellent cooperation from Michigan Bell.

8. McCullough Realty—Cut over went smooth. However, we are currently having problems with Michigan Bell service. On 8/25 a line in trouble. It took three (3) subsequent service requests to convince Michigan Bell that the problem was theirs. It was then that we realized that Michigan Bell does not maintain a stock of STC for maintenance nor are their repairmen equipped with the proper tools or "specs" to dismantle or repair the equipment you charge us for. Repaired 9/6.

9. Goodfellow—On this job the installer left the interface for us to hook up. He did not have Michigan Bell specs.

10. Carpet Center—Abandoned cable.

11. Walter Herz—Missed due date. One (1) of ten (10) STC did not work. Problems of noisy cable and crosstalk. These were reported in June, and the noise problems still have not been corrected.

12. O'Neil Realty—Short three (3) CBH interface at cut date. Hardwired per Michigan Bell. Cable cut off in conduit. Michigan Bell installer did not have our order for private line.

13. Robinson Furniture—Problems getting interface to our equipment location.

14. Hiller-Lutey—Michigan Bell cut cable off in conduits, we had to remove.

15. Lilley Homes—Cut with no problems.

16. Oakland Press—Addition of three (3) lines took three (3) weeks after they were installed before we could get someone to repair them. We ordered lines to be trunk hunting, however, Michigan Bell neglected to tell us that none were available.

17. Crown Heating—Missed due dates.

18. Pontiac Tractor—Missed due dates by three (3) weeks. One of their reasons was "a going away party".

19. Neerie Alix—Did not even start temporary installation until it was two (2) days over due.

20. Russ Johnson—Due 8/11 still not installed. Refusal to locate power failure instrument at our desired location. Unsatisfactory wiring of ground wire across face of building. Michigan Bell marketing man drives by Russ Johnson

on the way home, it was his astute opinion that the customer was not ready for STC, so he delays order. Last four (4) numbers when installed were not in sequential hunt. Last number went to intercept operator. All interface finally working 9/23.

21. Keating—Missed due date.

22. Jax Kar Wash—Missed due date. Attempted to disconnect service at other location without any authorization. On initial installation four (4) of six (6) STC ordered were installed. Order finally completed on 9/20.

23. Mocerì—Missed due date. Michigan Bell only ordered six (6) STC when we specified eight (8). Michigan Bell has worked part of the order prior to cut date and did not notify us or the customer of number changes. Plus the number changes were not worked correctly.

I have list 23 jobs of which we have had contact with Michigan Bell on, only 2 jobs had no problems.

On all letters written to Michigan Bell we state "if you have problems or questions, please contact us". We have not received one phone call or one letter prior to commitments. We continually call to inquire on the job status, for which we receive the reply "I will get back with you" or "no problems". We have yet to have a Michigan Bell marketing man to return our call by the time promised, and there are very few instances that we find "no problems". We have been continually assured by Michigan Bell that every effort to acquire, maintain, and meet due dates of interface are being made. The only assurance I have from Michigan Bell is not to rely on Michigan Bell for anything.

We have been told that Arcata and the other interconnect companies receive special attention. If Arcata receives some sort of special attention, I must ask which direction the attention is sent. I hardly feel that as far as the general public is concerned that Michigan Bell fails to meet less than 5% of their commitments. I therefore must ask that the service that Arcata is receiving from Michigan Bell presently should be vastly improved immediately to meet with your own high standards of service.

The most important point to bring out in this letter is "what is going to happen in the future"? Arcata does not want a relationship which is strained. Arcata does not want to form opinions which are not consistent with your company's policies. Arcata is willing to work with Michigan Bell on any problem. Is Michigan Bell willing to work with Arcata?

Here are some thoughts that may help Arcata and Michigan Bell provide better service for *OUR* customers.

1. Clear cut procedure in ordering of interface for Arcata and Michigan Bell. This includes due dates, correct and standard ordering information (perhaps your USOC code), a verification for equipment commitment dates from Michigan Bell.

2. Better and more training of Michigan Bell installation and maintenance people.

3. Give us a definite procedure that will be followed universally by Michigan Bele Telephone.

4. A direct line of communication between Arcata Service and Michigan Bell Service. This would save money and time for Michigan Bell.

5. Realization that there is a point that Arcata changes roles from a competitor to a customer.

The motives for this letter are: (1) not to chastise for past problems, but to enhance the opportunities for an amiable working relationship in the future. (2) remind Michigan Bell Telephone that we expect once a job is sold to be treated as a customer not a competitor, and (3) our mutual customers should be treated equally regardless of whose equipment they use.

A response to this letter would be greatly appreciated.

Sincerely,

TIM GRIGGS,
Installation Manager.

Exhibit 48A

MICHIGAN BELL,
Grand Rapids, Mich., May 5, 1970.

Re: Interconnection

D. V. McKERSIE,
President,
Telephone Power, Inc.,
Grand Rapids, Mich.

DEAR SIR: This is to confirm our conversation of April 28, 1970, regarding:

A. "Automatic" Interconnection of a Privately-Owned Coin Telephone.

B. "Automatic" Interconnection of Stromberg-Carlson 1A2 Key Type Dial Telephones equipped with Pick-Up, Hold, Lamps and a Dial-Selective Intercom System.

At this time we decline approval for interconnection as described in "A" above for two reasons:

1. The supplier or manufacturer of communications equipment must specify the connecting device to be used, for which their equipment was designed, from those which are "Bell System" approved. The technical specifications for these devices have been supplied to many manufacturers. These specifications are also available by writing to American Telephone & Telegraph Company, 195 Broadway, New York, New York 10007.

2. This type of interconnection would violate the provisions of Michigan Bell Telephone Company Tariff M.P.S.C. No. 7, Sheet 6, paragraph B-2, which states in part:

"Services and facilities shall not be used for any purpose for which a payment or other compensation shall be received by them or either of them from any person, firm or corporation for such use, or in the collection, transmission or delivery of any communications for others—. . ."

At this time we also decline approval for interconnection as described in "B" above for the following reason:

1. The supplier or manufacturer must specify the connecting device to be used from those which are "Bell System" approved. As stated previously, information on "approved" devices is available.

As I discussed with you, Michigan Bell will not do anything further to meet your requests for this type of interconnection until you provide us with the information requested above. Requests for engineering of special "Connecting Devices" should be directed to American Telephone and Telegraph.

If you have any additional questions on these two requests, or any questions on interconnection in general, please call me on 459-9868.

Sincerely,

CHARLES L. WYRICK,
Sales Manager.

TELEPHONE POWER, INC.,
May 6, 1970.

Mr. THOMAS J. STORC,
Manager of Market and Product Planning,
Stromberg-Carlson,
Rochester, N.Y.

DEAR MR. STORC: This is to confirm our discussion of Monday, May 4, 1970, regarding our request to Michigan Bell Telephone Company to interconnect Stromberg-Carlson key type telephones located in our offices.

The Telephone Company instructed us to go back to the supplier for information on an approved interface arrangement. See copy of letter attached.

Would you please assist us in obtaining the necessary interface to activate this equipment. We have installed your telephones and are most anxious to obtain their operational benefits.

Sincerely,

DONALD V. McKERSIE, President.

EXHIBIT 49

BELL SYSTEM PRACTICES
AT&TCo Standard

SECTION 463-340-101
Issue 1, May 1971

KS-20721 STATION COUPLER
VOICE CONNECTING ARRANGEMENTS
SU6AQ SU7QW, RDMZR, RDY, STC, STS

1. GENERAL

1.01 This section provides identification, installation, operation, maintenance and connection information for the KS-20721, List 1 and KS-20721, List 2 general purpose station couplers when used in Voice Connecting Arrangements (VCA) SU6AQ, SU7QW, RDMZR, RDY, STC, and STS.

1.02 The KS-20721 station coupler (Fig. 1) may be used in place of the KS-20008 control unit (MD) and the KS-20445, List 1 control unit, since the same customer connector is used and most of the control leads perform identical functions. The KS-20721 can provide the same functions as the KS-19522 (2W) recorder coupler but requires different plug and wiring connections.

1.03 The customer should be informed by the manufacturer or supplier of the equipment of the proper Voice Connecting Arrangement to be used with his equipment.

1.04 If the customer wants a copy of the Technical Reference which covers any of the above Voice Connecting Arrangements, the customer should contact the local Telephone Company Business Office or the Marketing Representative.

1.05 Lettered Steps: A letter a, b, c, etc, added to a step number in Part 5 of this section indicates an action which may or may not be required depending on local conditions. The condition under which a lettered step or a series of lettered steps should be made is given in the ACTION column, and all steps governed by the same condition are designated by the same letter within a test. Where a condition does not apply, all steps designated by that letter should be omitted.

1.06 The KS-20721 station coupler is used to provide the connecting arrangements described in Table A. The connecting arrangement code and Universal Service Order Code (USOC) suffixes

are chosen, where possible, to correspond to the options and list numbers shown.

1.07 Voice Connecting Arrangements RDMZR, RDMZY, and RDY: These connecting arrangements are intended to replace the existing VCA RDM which uses a modified KS-19522 recorder coupler (2-way transmission, 1.02) to connect customer-provided (CP) answering sets and recorders. VCA RDMZR is used where the serving central office provides a battery reversal or momentary open when the calling party disconnects. This allows the Calling Party Control (CPC) circuit to automatically disconnect the CP answering set. VCA RDMZY is used where the serving central office does not provide a disconnect signal when the calling party disconnects. In this case the List 12 voice control (option Y) is used at the option of the Telephone Company to provide automatic disconnection of the CP equipment. VCA RDY is used where the customer requests the automatic volume limiting feature of the List 12 voice control for use with his recorder.

1.08 Voice Connecting Arrangements SU6AQ and SU6AV: These connecting arrangements are intended to replace the existing VCA SU6 which uses a modified KS-20445 control unit (2-way transmission) to connect CP alarm sending devices and systems. VCA SU6AQ is used where the serving central office is other than SXS where the List 11 pulse corrector is not required. VCA SU6AV is used where the serving central office is SXS and the List 11 pulse corrector is required by the Telephone Company.

1.09 Voice Connecting Arrangements SU7QW and SU7VW: These connecting arrangements are intended to replace the existing VCA SU7 which uses a modified KS-20445 control unit (repertory dialer) to connect CP dial pulse dialers that require no transmission paths. VCA SU7QW is used where the serving central office is other than SXS and where the List 11 pulse corrector is not required. VCA SU7VW is used where the

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TABLE A

VOICE CONNECTING ARRANGEMENT	TYPICAL CUSTOMER PROVIDED EQUIPMENT	KS-20721 STATION COUPLER LIST NUMBERS	TYPICAL OPTIONS
RDMZR	Answering Set	List 1	Q, R, Z
RDMZY	Answering Set	List 2*†	Q, R, Y, Z
RDY	Answering Set	List 2	Q, R, Y, Z
SU6AQ	Alarm Systems	List 1	Q, R, Z
SU6AV	Alarm Systems	List 1, 10,† 11†	R, V, Z
SU7QW	Dialers	List 1	P, Q, W
SU7VW	Dialers	List 1, 10,† 11†	P, V, W ↓ ↓ ↓ ↓
STCQX	Extension Telephones	List 1, 10, 14	P, Q, S, X, Z
STCVX	Extension Telephones	List 1, 10,† 11, 14†	P, S, V, X, Z
STSQT	Tone signaling devices	List 1, 10, 13	Q, R, T, Z
STSVT	Tone signaling devices	List 1, 10, 11, 13†	R, T, V, Z

*List 2 consists of Lists 1, 10, and 12

†Telephone Company Option

MONTHLY
RATE

\$ 5.00

\$ 3.75 (PROPOSED
RATE
5.10)

3.75

serving central office is SXS and where the List 11 pulse corrector is required by the Telephone Company.

1.10 Voice Connecting Arrangements STSQT and STSVT: These connecting arrangements are intended to replace the existing VCA CAU plus SU3 (also coded VCA-SU4) or VCA SU6 plus SU3 used with the KS-20445 List 2 control unit or the modified KS-20445, List 2 control unit (2-way transmission), respectively, to provide a means for CP alarm sending devices or systems to transmit

and receive supervisory tones. VCA STSQT is used where the serving central office is other than SXS and where the List 11 pulse corrector is not required. VCA STSVT is used where the serving central office is SXS and the List 11 pulse corrector is required by the Telephone Company.

1.11 Voice Connecting Arrangements STCQX and STCVX: These are new connecting arrangements that are intended to be used to connect extension telephone sets or key system line circuits or stations (not requiring lamp supervision).

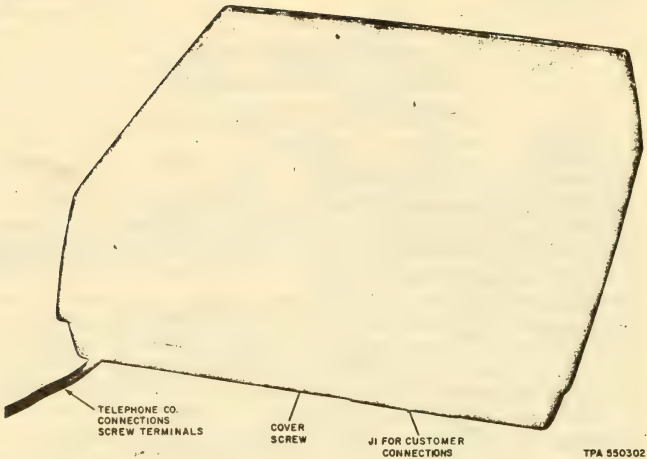


Fig. 1—KS-20721, List 1 or List 2, Station Coupler

VCA STCQX is used where the serving central office is other than SXS and where the List 11 pulse corrector is not required. VCA STCVX is used where the serving central office is SXS and where the List 11 pulse corrector is required by the Telephone Company.

1.12 An associated telephone set may make a normal outgoing call with any of the arrangements.

1.13 The KS-20721, List 15 test set is used to test the station coupler.

2. IDENTIFICATION

(a) Purpose

- To provide facilities for connecting various types of CP equipment to the telephone line
- To limit excessive levels from CP equipment and to provide protection for personnel and facilities against hazardous voltages.

(b) Application

- Used to interface with CP telephone answering sets, message recorders, dictation machines, alarm systems, repertory dialers, intercom systems, and extension telephones.

(c) Ordering Guide

- Coupler, Station, KS-20721L1 (Fig. 2)
- Coupler, Station, KS-20721L2 (Fig. 3)

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- Assembly, Hinge, KS-20721L10 (Fig. 3)
- Corrector, Pulse, KS-20721L11 (Fig. 5)
- Control, Voice, KS-20721L12 (Fig. 6)
- Limiter, KS-20721L13 (Fig. 7)
- Supply, Ring, KS-20721L14 (Fig. 8)
- Set, Test, KS-20721L15 (Fig. 9)
- Tool, KS-19192L1
- Transformer, 2012B

(d) **Design Features:** The KS-20721 station coupler provides the following features:

- DC isolation and high-voltage surge protection
- 20 Hz ringing detection (an isolated contact that closes during the last half of each ringing cycle is provided to the customer)
- Network control signaling (off-hook, dial pulse, tone address signaling, and ringing).
- Two-way voice transmission (with option S provides dc supply for extension telephones and network control over CT and CR)
- Automatic or controlled answer and disconnect (DC calling party controlled disconnect)
- AC or DC powered (Telephone Company provided 2012B transformer or customer provided 21 \pm 5V dc).

2.01 The KS-20721, List 1 station coupler (Fig. 2) is the basic unit, designed to be field equipped with a KS-20721, List 10 hinge assembly for mounting any combination of the four optional circuit packs (Fig. 4). The circuit packs are equipped with quick connect Malco lead connectors for easy installation.

2.02 The KS-20721, List 2 station coupler (Fig. 3) consists of a KS-20721, List 1 station coupler with a KS-20721, List 10 hinge assembly and KS-20721, List 12 voice control factory installed. The List 2 coupler should be used where the serving central office does not provide a disconnect signal when the calling party disconnects.

2.03 The KS-20721, List 11 pulse corrector (Fig. 5) is used to correct percent break of dial pulses from CP equipment served by SXS central offices.

2.04 The KS-20721, List 12 voice control (Fig. 6) provides for automatically disconnecting the coupler from the telephone line in central offices that do not transmit a disconnect pulse to the called party when the calling party disconnects. It also provides a -5 dBm volume limited output from a line bridging amplifier to the CP equipment.

2.05 The KS-20721, List 13 limiter (Fig. 7) limits the average power delivered to the central office to -12 dBm.

2.06 The KS-20721, List 14 ring supply (Fig. 8) supplies a high voltage 20 Hz ringing signal for operating up to three CP ringers (C4 type or equivalent).

2.07 The KS-20721, List 15 test set plugs into the connector on the station coupler and is used with a 1013-type handset (or equivalent) to check the operation of the coupler after installation (Fig. 9).

3. INSTALLATION—KS-20721, LISTS 1 AND 2, STATION COUPLERS

3.01 The location and method of installing the station coupler shall be consistent with standard practices. The KS-20721 station coupler is designed for wall or shelf mounting, weighs 4 lbs, measures approximately 9 inches square by 3 inches deep, and has a metal base with plastic cover. (Cover screws require KS-19192, List 1 tool to remove).

3.02 A 15-pin connector (J1) (Fig. 1) is located on the base of the unit to connect the transmission path and control leads to the CP equipment. The mating Cinch plug (P1) (plug No. 231-15-61-133 with Hood No. 239-13-99-069) is customer-provided and prewired to his equipment. Screw terminals on the left side of the printed circuit board provide connections to the CO line, telephone set, and 2012B power transformer. Flexible jumper leads with Malco connectors provide for installation options.

3.03 If practical locate station coupler within 5 feet of associated telephone company telephone

1.65/td

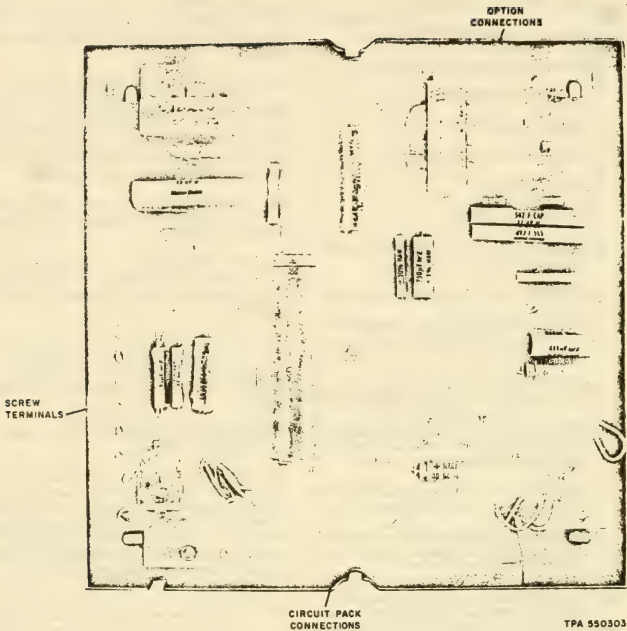


Fig. 2—KS-20721, List 1 Station Coupler, Cover Removed

set and connect telephone set mounting cord directly to station coupler, otherwise interconnect telephone set and station coupler using D station wire. Secure telephone set mounting cord or D station wire to clamp at lower left corner of station coupler.

3.04 The station coupler should be located so as to be readily accessible for maintenance and close to a 115V ac convenience outlet not under control of a wall switch. When power is supplied by a 2012B transformer, a current limited, positive

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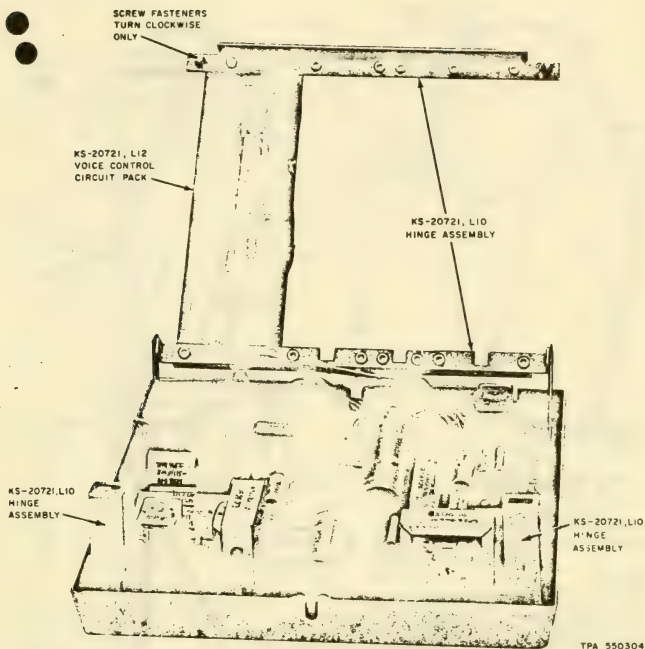
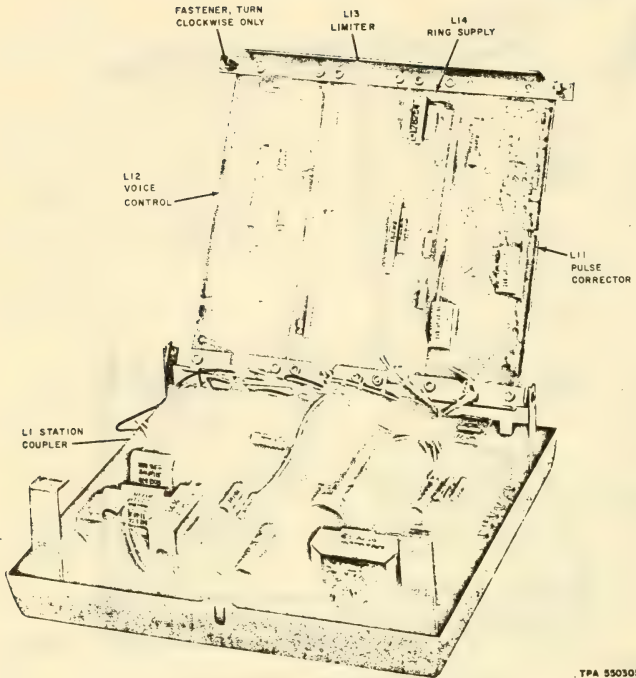


Fig. 3—KS-20721, List 2 Station Coupler, Cover Removed



TPA 550305

Fig. 4—KS-20721 Station Coupler with Optional Circuit Packs

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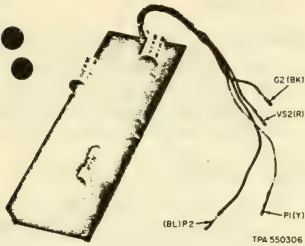


Fig. 5—KS-20721, List 11 Pulse Corrector

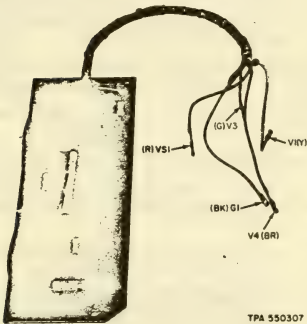


Fig. 6—KS-20721, List 12 Voice Control

21 \pm 5 volts dc is provided to the customer on lead B1 (ground return on lead B2). If the customer furnishes power, 21 \pm 5 volts dc is connected to leads B1 and B2 through plug (P1).

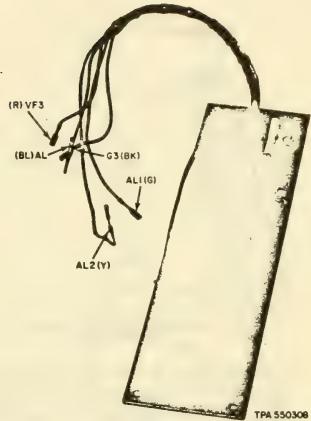


Fig. 7—KS-20721, List 13 Limiter



Complete all installation work before connecting the 2012B transformer or the CP equipment.

CIRCUIT PACK INSTALLATION

3.05 The KS-20721, Lists 11, 12, 13 and 14 circuit packs may be easily installed in the field. The installer may add any combination of the optional circuit packs initially or to an existing installation.

LIST 11 PULSE CORRECTOR (SXS SERVING CENTRAL OFFICE)

3.06 The pulse corrector is used when the CP pulses have the correct rate (8-11 pps) but



Fig. 8—KS-20721, List 14 Ring Supply

do not meet the 58 to 64 percent break requirements. The pulse corrector circuit reforms the pulses to correct the percent break ratio, eliminates transients, contact bounce, and split pulses less than 10ms duration. This circuit permits normal supervision and flashing.

LIST 12 VOICE CONTROL (SERVING CENTRAL OFFICE IS OTHER THAN 5XS OR = 5 CSBR)

3.07 The List 12 voice control consists of a speech detector and a 13-second timer that is kept reset by pulses from the speech detector when voice signals are present on the telephone line. In the absence of speech signals the timer will time out in approximately 13 seconds disconnecting the coupler from the line. Central office receiver off-hook tone generator will prevent operation of the List 12 voice control. An automatic volume limited (AVL) amplifier is part of the speech detector and provides a relatively constant -5 dBm speech level at 600 ohms to leads AVL and ground. The customer may use this AVL amplifier to drive a tape recorder, paging system, or other equipment. The List 12 voice control is required when the local central office does not provide a suitable disconnect signal (momentary interruption in line current) when the calling party goes on-hook.

LIST 13 LIMITER

3.08 The List 13 limiter circuit protects the telephone facilities from excessive tone signal levels from the CP equipment. Average power limiting is achieved by a photoresistor shunting the transmission path. A level detector drives current through the lamp controlling the photoresistor when the signal amplitude goes above -10 dBm.

LIST 14 RING SUPPLY

3.09 The List 14 ring supply provides a high voltage (85V RMS 20 Hz) ringing signal to leads RU1 and CR to operate up to three CP ringers (C4 type or equivalent). The circuit consists of a dc to dc inverter supply, and a relay driver. The inverter changes the 21V dc input to approximately 120V dc output. Wiring option X changes connections to the RU relay and contacts. When ringing is present, the RU relay operates at a 20 Hz rate to alternate the polarity of the 120V dc output to provide the 85V RMS ringing signal.

3.10 To add optional circuit packs, perform the following steps:

- (1) Disconnect the customer equipment cable from the station coupler.
- (2) Remove the cover from the station coupler using the KS-19192, List 1 tool; disconnect all external leads from terminal screws. Remove station coupler from wall or shelf and move to a suitable work area.

Note: Connections removed should be marked for correct and easy replacement.

- (3) Attach KS-20721, List 10 hinge assembly to the four corner screws mounting the List 1 board. Refer to Fig. 3 and 4.
- (4) The installer can mount any combination of circuit packs on the internal mounting frame formed by the hinge assembly. Place board in correct position on frame (Refer to Fig. 4 or cover label) and secure with four corner mounting screws furnished with circuit pack.
- (5) Change flexible jumper leads on List 1 board as shown in Table A.

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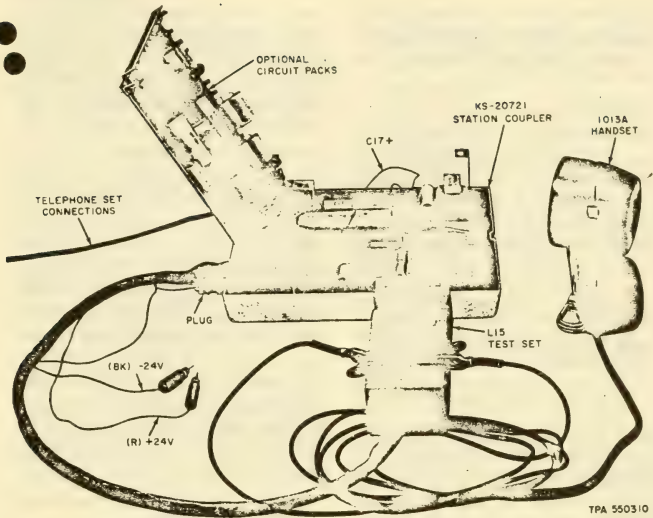


Fig. 9—KS-20721 Station Coupler with KS-20721, List 15 Test Set and 1013A Handset

(6) Plug connecting leads from boards into corresponding Malco terminals on List 1 board per Table A and Fig. 5, 6, 7, and 8. Dress leads to avoid interference with boards and cover and secure leads with cable clamp provided.

(7) Close hinge assembly and fasten the two top corner fasteners.



Turn fasteners clockwise only to open or close. (Fastener may break if turned counterclockwise.)

(8) Reinstall station coupler and reconnect leads disconnected in step (2).

3.11 After installation is completed, perform operational tests given in Part 5 to check for proper operation before CP equipment is connected.

4. METHOD OF OPERATION

GENERAL

4.01 The KS-20721, List 1 station coupler (Fig. 12) consists of a 20 Hz ringing signal detector operating ring up (RU) relay, a supervisory control

circuit operating line transfer (TR) relay, dial pulsing (PR) relay, and calling party control (CPC) relay, a transmission circuit consisting of two transformers in tandem, a peak voltage limiter, and a power supply rectifier and filter circuit.

OUTGOING CALL

4.02 When the customer goes off-hook, the CP equipment provides a contact closure to the off-hook leads OH1 and OH2, or when option S is used, the CP equipment provides a dc termination across leads CT and CR to permit network control (off-hook, and dialing) without using leads OH1 and OH2. After a 1-second delay, during which time the coupler will terminate a call originated from a phone connected to T1 and R1, the coupler will seize the telephone line and complete the 2-way transmission path (if P option is provided the 1-second delay is eliminated). The closure between leads OH1 and OH2 must be maintained for the duration of the call, except during dial pulsing. The CP equipment maintains the closure until dial tone is returned before transmitting dial pulses. The List 1 coupler repeats dial pulses through PR relay to the CO line. When the CP dial pulses do not meet the percent break requirements, the List 11 pulse corrector is required for SXS central offices only. Two-way transmission is provided during line seizure; dial tone and call progress tones are returned to the CP equipment. The transfer leads are operated by the TR relay to indicate coupler status to the CP equipment. During line seizure leads TR1 and TR2 are closed, leads TR2 and TR3 are opened. When the line is released leads TR1 and TR2 are open and leads TR2 and TR3 are closed.

DISCONNECT OUTGOING CALL

4.03 When the CP equipment goes on-hook by opening leads OH1 and OH2 (or leads CT and CR when using option S) PR relay releases causing TR relay to release and terminate the call.

INCOMING CALL

4.04 When 20 Hz ringing is detected by the ring detector circuit, relay RU will operate for approximately 1 second during each ringing cycle closing leads RU1 and RU2 to indicate ringing to the CP equipment. When List 14 ring supply is used with option X, a high voltage (85V RMS, 20Hz) ringing signal is applied between leads CR

and RU1 to the CP equipment to operate up to three CP ringers (C4 type or equivalent). The ring detector circuit also causes PR relay to operate and hold for about 4 seconds during which time if the RU1 and RU2 leads are connected across leads ANS and B1 the coupler will automatically seize the line to trip ringing. The CP equipment may answer the call by:

- (a) Closing leads OH1 and OH2.
 - (b) Closing leads CT and CR through a resistive termination (when option S is used).
 - (c) Closing lead ANS to lead B1 momentarily.
- Performing (a) or (b) causes TR relay to operate causing line seizure, since PR relay was already operated by the ring detector. Performing (c) causes PR relay to stay operated and causes TR relay to operate. Telephone line current operates CPC relay which causes PR and TR relays to stay operated after lead ANS is disconnected from lead B1. Any of the actions listed in (c) will cause the coupler to terminate the telephone line and answer the incoming call. Two-way transmission is provided immediately on line seizure, leads TR2 and TR3 are opened, leads TR1 and TR2 are closed, indicating line seizure. When the ANS lead is closed to B1 to answer the call, leads OH1 and OH2 must not be connected and there should be no dc termination across CT and CR.

DISCONNECT INCOMING CALL

4.05 The coupler will remain connected to the telephone line until it is caused to disconnect by:

- (a) A disconnect pulse (a momentary open or battery reversal) is received from the CO. (Some COs give a momentary open only after time-out.)
- (b) The CP equipment closes lead DIS to lead B2.
- (c) List 12 voice control causes disconnect when speech is absent for approximately 13 seconds.

Any of the actions described cause TR and PR relays to release disconnecting the coupler from the line.

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DIAL PULSE REPERTORY DIALER (NO TRANSMISSION PATH)

4.06 With a repertory dialer (Fig. 11) the customer goes off-hook with the associated telephone company telephone set and after receiving dial tone operates his dialer to outpulse the desired station code. The dialer pulsing contacts open and close leads OH1 and OH2 causing PR relay to repeat the pulses over leads R and R1 to the telephone line. The muting (off-normal) contacts from the CP dialer, if provided, open and close the muting leads MU1 and MU2 causing RU relay to repeat closures on leads A and A2 to mute the telephone set receiver during outpulsing. To prevent a false dial pulse, power must be applied to the coupler and leads OH1 and OH2 must be closed before the associated telephone handset goes off-hook. If a power failure occurs, the coupler automatically connects the telephone set across the line so the customer can dial manually.

LIST 15 TEST SET

4.07 The List 15 test set (Fig. 9 and 13) is used for connecting the 1013-type handset (or equivalent) and a connecting cable terminated in a plug for connection to the station coupler. The test set simulates the connections of CP equipment to check out the operation of the circuits and interface leads to the CP equipment.

4.08 When detailed circuit description and operation information is required, refer to CD- and SD-69903-01.

5. MAINTENANCE

5.01 When trouble is reported verify that:

- Customer connector plug is secure in coupler

● Preparation

STEP	ACTION	VERIFICATION
1	Rotate selector switch on List 15 test set to OFF.	
2	Remove cover of station coupler using KS-19192, List 1 tool	

- Power is supplied to station coupler with correct polarity

- CO pair is good.

- Leads to CO line and telephone set are secure

- Wiring options and coupler connections are correct.

5.02 After performing steps in 5.01, if trouble still exists, perform the following operational test.

OPERATIONAL TESTS

Make all operational tests with CP equipment disconnected.

5.03 Test for proper operation of the station coupler using the KS-20721, List 15 test set (Fig. 9). The test set permits testing of the station coupler independent of the customer equipment.

5.04 Apparatus Required:

- (a) List 15 Test Set
- (b) 1013A (or equivalent) Handset
- (c) KS-6571 (or equivalent) battery (if coupler is powered by CP equipment)


STEP	ACTION	VERIFICATION
3	Connect a 1013A (or equivalent) handset to terminals provided on test set (Fig. 9).	
4a	If coupler is normally powered by CP equipment— Use a 24V (KS-6571 or equivalent) battery and connect the pin-tipped red lead from the test set to +24V and black lead to -24V.	
5b	If option S is not provided— Connect alligator clip on wire coming from the test set plug to the positive (+) terminal of capacitor C17 in the station coupler.	
6	Connect test set plug to receptacle on station coupler.	White lamp extinguished Red lamp extinguished.

5.06 Method

7c	If option S provided— Operate switch on handset to MON.	
8c	Rotate selector switch of test set to position 1.	White lamp lighted. Dial tone heard in handset receiver at a low level.
9c	Rotate selector switch of test set to position 2.	White lamp extinguished. Dial tone silenced.
10	Rotate selector switch of test set to position 2.	
11	Operate switch on handset to TALK.	White lamp lighted. Dial tone heard in handset receiver.
12	Using the handset, call the local test desk and request the testman to call back, proceed to Step 13 immediately.	
13	Operate switch on handset to MON.	White lamp extinguished.
14d	If List 14 ring supply not provided— Rotate selector switch of test set to position 3.	
15d	Testman returns call.	White lamp flashes in unison with ringing cycle.

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STEP	ACTION	VERIFICATION
18e	If List 14 ring supply provided— Rotate selector switch of test set to position 4.	White lamp extinguished. <i>Note:</i> Disregard flash of white lamp when selector switch is moved from 2 to 4.
17e	Testman returns call.	Red lamp flashes (both elements) in unison with ringing cycle.
18	Rotate selector switch of test set to position 5 and operate switch on handset to TALK.	White lamp lighted steady. (Red lamp extinguished if lighted in step 16e.)
19f	If List 12 voice control not provided— Rotate selector switch of test set to position 6.	
20f	Request testman to release the line.	
21f	Operate switch on handset to MON and wait for disconnect.	White lamp extinguished within 1 minute (indicates disconnect).
22g	If List 12 voice control provided— Request the testman to disable his transmitter while retaining talk battery on the line.	
23g	Operate switch on handset to MON, wait 20 seconds then operate switch to TALK.	White lamp remains lighted.
24g	Rotate selector switch of test set to position 6 and talk for at least 10 seconds and request testman to remain silent for 20 seconds then disconnect.	
25g	Operate switch on handset to MON and wait for disconnect.	White lamp extinguished in approximately 13 seconds.
26	Rotate selector switch of test set to position 7.	White lamp remains extinguished (if white lamp lights, verify that switch on handset is in MON position. Rotate selector switch of test set back to position 6, wait for lamp to extinguish then rotate back to position 7 and proceed with test.)
27	Rotate selector switch of test set to position 8.	White lamp lighted. Dial tone heard in handset receiver. (If there is an abnormal delay before proceeding to the next step, some offices may return a dial tone time-out indication. If this happens, rotate selector switch to OFF then back to position 8, dial tone will return and proceed with test.)

STEP	ACTION	VERIFICATION
28g	Rotate selector switch of test set to position 9. (The 13-second time-out starts at this time and may cause disconnect. If this happens, rotate selector switch to position 8 then back to 9 and proceed with test.)	White lamp remains lighted. Dial tone level is increased.
29f	If List 12 voice control not provided— Rotate selector switch of test set to position 9.	White lamp remains lighted. Dial tone silenced.
30	Rotate selector switch of test set back to position 8.	White lamp remains lighted.
31	Rotate selector switch of test set to OFF.	White lamp extinguished.
32 ^a	Disconnect test set from station coupler and reconnect CP equipment.	
5.07	If coupler does not meet the above tests, replace coupler and/or circuit packs.	● Leads to telephone set are secure
5.08	If the trouble is toward the CP equipment, inform the customer that the trouble tests toward his equipment and follow local reporting procedures for CP trouble.	● Customer connector plug is secure in coupler ● Wiring option W and coupler connections are correct.
	<i>Do not attempt any test or repair to the customer-provided equipment.</i>	5.11 After performing steps in 5.10, if trouble still exists, proceed with the following operational tests.

TEST FOR REPERTORY DIALER (DIAL PULSE ONLY)

5.09 When trouble is reported, determine if the trouble is in the station coupler or the CP equipment.

5.10 Before performing operational tests verify that:

- Power is supplied to station coupler with correct polarity

OPERATIONAL TESTS

Perform all operational tests with CP equipment disconnected.

5.12 Test for proper operation of the station coupler, using the KS-20721, List 15 test set (Fig. 9). The test set permits testing of the station coupler independent of the customer equipment.

5.13 Preparation

STEP	ACTION	VERIFICATION
1	Rotate selector switch on List 15 test set to OFF.	

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STEP	ACTION	VERIFICATION
2	Remove cover of station coupler using the KS-19192, List 1 tool.	
3	Connect a 1013A (or equivalent) handset to terminals provided on test set (Fig. 9).	
4a	If coupler is normally powered by CP equipment— Use a 24V (KS-6571 or equivalent) battery and connect the pin-tipped red lead from the test set to +24V and black lead to -24V.	
5	Connect test set plug to receptacle on station coupler. Connect alligator clip on wire coming from the test set plug to the positive (+) terminal of capacitor C17 in the station coupler.	White lamp extinguished. Red lamp extinguished.
5.14 Method		
6	Operate switch on handset to MON.	
7	Rotate selector switch of test set to position 1.	White lamp remains extinguished. Red lamp remains extinguished.
8	Rotate selector switch of test set to position 2.	White lamp remains extinguished. Red lamp remains extinguished.
9	Rotate selector switch of test set to position 3.	White lamp lighted.
10	Rotate selector switch of test set to position 6.	White lamp extinguished.
11	Operate switch on handset to TALK.	White lamp lighted. Weak dial tone heard at associated telephone set.
12	Dial a test number using the handset while listening at the associated telephone.	Dial pulses should be muted to a low level.
13	Rotate selector switch of test set back to position 4.	White lamp extinguished. Ringback signal heard.
5.15	If coupler does not meet the above tests, replace coupler and/or circuit packs.	5.16 If the trouble is toward the CP equipment, inform the customer that the trouble tests

toward his equipment and follow local reporting procedures for CP trouble.



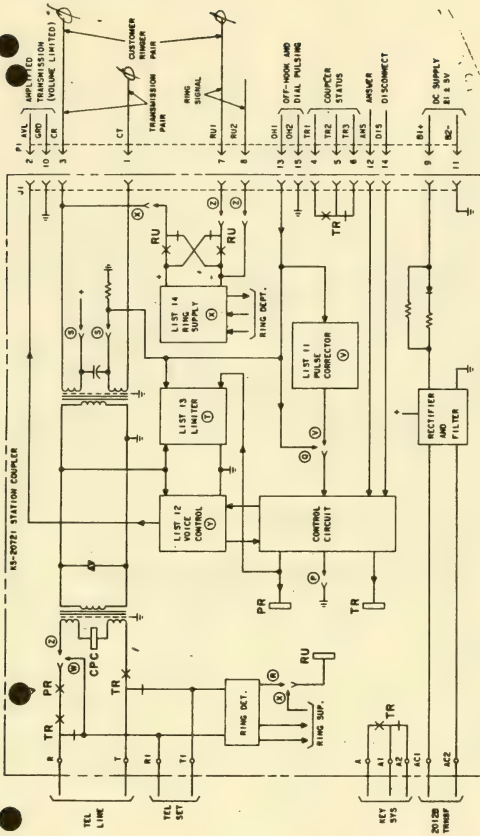
Do not attempt any test or repair to the customer provided equipment.

6. CONNECTIONS

6.01 Connections to the CP equipment are made through the 15-pin KS-19087, List 1 female connector on the coupler. The customer must furnish a suitable connecting cable equipped with a Cinch Manufacturing Co. No. 231-15-61-133 plug with a No. 239-13-9-069 hood (or equivalent).

6.02 Provide the correct wiring options from Table B and Fig. 12, connect the CO line, key system, 2012B power transformer, if required, and associated telephone set to the screw terminal connections as shown in Fig. 10. (Refer to Section 463-340-100 for typical connections with key telephone systems.)

6.03 For connections to a repertory dialer, provide wiring option W from Table B and Fig. 12 and connections to telephone set as shown in Fig. 11. The coupler pulsing contacts are connected in series with the telephone set dial by using screw terminals R and R1. Leads from screw terminals A1 and A2 connect across the telephone set receiver to provide muting during outpulsing.



- NOTES:
1. CIRCLED LETTERS ①, ②, ETC. DENOTE WIRING OPTIONS.
 2. W. OPTION SHOWN IN FIG. 11.
 3. P1 IS CUSTOMER PROVIDED PLUG.
 4. CIRC. NO. 231-18-01-33 WITH HOOD NO. 238-13-99-048.

Fig. 10—KS-20721 Station Coupler, Block Diagram

TPA 550311

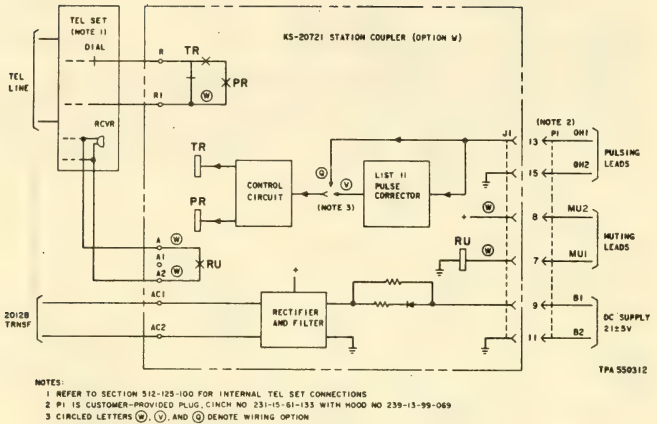


Fig. 11—KS-20721 Station Coupler Repertory Dialer, Block Diagram



Fig. 12—KS-20721 Station Coupler, Connections

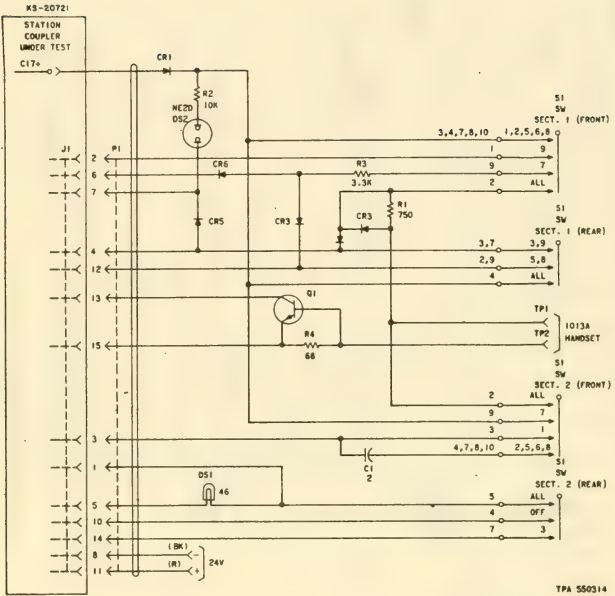


Fig. 13—KS-20721, List 15 Test Set, Schematic

SECTION 463-340-101

TABLE 8
WIRING OPTIONS

LEADS CONNECT TO TERMINALS ON LIST 1 BOARD												
L1 WIRING OPTIONS									L11	L12	L13	L14
L1 LEADS	COLOR	NON FUNCTIONAL TERMINAL	P	Z	R	Q	S	W	V	Y	T	X
GN	G			N				RD				
K2	BL	K1					K3					
K5	S	K4					K6					
F11	O	F10										F9
E10	BR	F6						F8				
E9	V	F4						F7				
F3	BK				F1			F5				F5
P3	Y					P2			P3			
J1-7*	S			F8				F2				F8
J1-8*	BL			F7				VF1				F7
	W	M	G5									
Leads from Circuit Packs	R								VS2	VS1	VF3	VF4
	BK								G2	G1	G3	G4
	Y								P1	V1	AL2	F1
	BL								P2	V2	AL	F2
	G									V3	AL1	F14
	BR									V4		
	S											F12
	O											F13

*These leads originate from J1 connector.

Leads are stored on nonfunctional terminals.

Note 1: R Option is removed before installing X or W option. Q Option is removed before installing V option. S or P Option may be wired with any option. Q Option is used with W when pulse correction is not required. V Option is used with W when pulse correction is required.

Exhibit 50

MAY 17, 1973.

Mr. E. F. GIETZEN,
District Sales Manager,
Michigan Bell Telephone Co.,
Wyoming, Mich.

GENTLEMEN: We are presently paying Michigan Bell \$48.00 per month for eight DC-9 interface devices required by tariff for our privately owned telephone systems. Our supplier, TPI incorporated, has advised us that there is a SU6AQ interface device available which by tariff is intended for use in connection with an alarm reporting system, but which is fully capable of working with our twelve-button call director system.

We have also been advised by our supplier that there is another interface device available called a STC-RC which is exactly the same in design, but which, because it is a modification of the STC interface, is charged for at the rate of \$6.50 per month. We understand that the STC-RC has been used by Michigan Bell in other areas of the state in place of STC's and a rate of \$6.50 per month has and is being charged.

If, in fact, the STC-RC and the SU6AQ are exactly the same in design and cost, then we question why there is a rate differential of \$6.50 against \$3.75. Furthermore, since our supplier has advised us that either the SU6AQ or the STC-RC will serve the same function for our system as our present CD-9's and will, in fact, work, we are interested in replacing our present CD-9 with the cheaper interface device.

Therefore, we suggest that you replace all of our CD-9 interface devices with STC-RC interface devices at a rate of \$3.75 per month, or, in the alternative, replace our CD-9's with SU6AQ's at the same \$3.75 rate. We understand from our knowledge of your policy that this can be completed within two weeks. Will you please advise us of the date on which this change will be made and the total cost of the change-over.

Very truly yours,

LAW, BUCHEN, WEATHERS,
RICHARDSON & DUTCHER.

Exhibit 51

MICHIGAN BELL,
Wyoming, Mich., June 4, 1973.

Mr. J. NICHOLS,
Law, Buchen, Weathers, Richardson & Dutcher,
Grand Rapids, Mich.

DEAR SIR: This is in reply to your May 17, 1973 letter regarding interface devices for your telephone system.

As indicated in your letter, there has recently been designed a type of "universal" interface with certain basic components, which with various additions, wiring options, etc., can be used to provide interconnection to a number of different services.

We are in the process of considering the provision of connecting arrangements on a "device" basis rather than on the present "service" basis. This would permit the ordering of the specific units desired rather than ordering on the basis of the type of customer-provided service.

Until such time as a decision is reached on this matter and required tariff revisions are made, connecting arrangements must be provided on a service basis as described in our filed tariffs.

Very truly yours,

E. F. GIETZEN,
District Sales Manager.

Exhibit 52

JUNE 12, 1973.

Re Tariffs covering SU6AQ, STCRC and STC Interfaces.

Mr. WAYNE WELLS,
Law Department,
Michigan Bell Telephone Co.,
Detroit, Mich.

DEAR WAYNE: Enclosed are copies of correspondence between our office and Michigan Bell Telephone. The letters are self-explanatory. We are extremely

disappointed in the results and it is our opinion that the results are wholly unsatisfactory.

Once again, it appears that Bell agrees with our reasoning, has the wherewithal to provide the service at a reasonable rate, and has elected not to do so until some unspecified future decision is reached concerning the filing of appropriate tariffs.

In keeping with our meeting of March 27, we are attempting to avoid having this matter decided before the Public Service Commission where the cost to the parties and the type of feelings which would be generated would seem to be unacceptable. You ask that we contact you with future problems and we are now doing so. In this particular instance, it is our telephones which are involved. Our clients face the same difficulties in providing service to their other customers.

Accordingly, we request that you act in the spirit of our meeting and cut through the "red tape" to resolve this issue.

Very truly yours,

LAW, BUCHEN, WEATHERS,
RICHARDSON & DUTCHER.

Exhibit 53

HAMMING—DIRECT

Furthermore, since 1955 there have been substantial changes in our offerings and the equipment providing these services. We now provide CALL DIRECTOR® sets and 10 button sets. We have added Series 200, Series 300 and Centrex to our PBX line. This accumulation over the last 17 years has gradually produced a PBX and key rate structure that is interrelated and complicated for customers to understand. Therefore, the second reason for restructuring is to simplify our present rate structure.

A third reason for restructuring is to establish rates more closely related to today's more flexible equipment which will satisfy customer demands for a wider choice of service features.

Moreover, in 1955 when our present key and PBX rates were established all elements of terminal services had to be provided by the Telephone Company. Therefore, rates for these services were "packaged" using broad averages and the overall return was the main consideration. Thus with today's schedule of rates we often find one item of service priced to support another item of service or equipment. With interconnection of certain customer provided equipment now permitted, rates need to be more closely aligned with the item of equipment providing a particular service. Otherwise we will lose many of our profitable services to competition and be left with the least profitable services.

* * * * *

(Pages 11-12)

Over the years since the present rate structure was introduced in 1955. As in the case of key service, the pricing of each new offering followed the original structure. The present PBX and key rates are interrelated as I will demonstrate and additions to either service added complications to both. So there is a need to simplify the PBX rate structure as well as the key rate structure.

Today's customer has a much greater choice of services than he had 18 years ago but we find he wants more choices. This consideration is also recognized by our proposals.

Today's PBX rate structure results in many inequities within the service. Customers with large systems carry some of the load for small systems; customers with high extension development pay a higher portion of the costs than those with few extensions; and customers with large key systems contribute more toward the revenue requirements for PBX services than customers with little or no key service. The new rate structure recognizes these problems and provides a more balanced schedule. It will help to protect us from losing to competition those services on which we now earn the higher returns while continuing to hold the least profitable ones, a situation which could eventually become a burden on all of our exchange services.

Q. Can you provide a brief overview of the restructuring proposals?

A. Yes. I've summarized the present and proposed rate approaches with a simple sketch shown on page 12.

Q. Please explain page 12.

A. At the top of the page the sketch depicts the present method of charging for most dial PBX services. We do not now apply a direct charge for switching equipment except for an extra charge for trunks terminating on the dial PBX equipment. PBX revenue is obtained from station and extension charges which now include a keyless instrument, if required.

There are several dial PBX service offerings today. The three major offerings are called series 100, 200 and 300. Series 100 provides basic dial service and Series 200 and 300 offer additional features on a packaged basis. The charges for the higher grades of service are obtained from higher station and extension rates. The present Series 160 provides one additional feature over Series 100 service. This offering is, however, limited to 60 stations and 10 trunks.

The rates for PBX-I, II and III are related directly to the switching equipment and the revenue requirements that we need to produce a profitable offering.

For both key and PBX services, we are increasing existing installation, move and change charges to recover more of the costs initially or instituting such charges where we have not had them before. We are also changing regulations as required for moves and changes of switching equipment to apply the charges to those customers who incur the cost rather than spread them over all customers on a prorated basis.

In addition, of course, there are a number of miscellaneous changes which are being proposed. In each of these cases, we are making the change to simplify the present rate treatment, to eliminate an inconsistency or to cover a specific revenue requirement.

I feel that this proposed rate treatment will update our rates to reflect current conditions of cost and competition. It will also be a structure that customers will be able to understand.

SAMPLES OF EFFECTS OF RESTRUCTURING KEY RATES

Reference	Systems	Size			Monthly revenue			Percent increase
		Lines	Sest	C.D.	Present ¹	Proposed	Increase	
A ²	Key sets.....	2	2	-----	\$5.10	\$13.00	\$7.90	155
B ²	Key sets.....	4	4	-----	20.60	26.00	5.40	26
C ²	Key sets.....	5	5	-----	32.00	32.50	.50	2
D ²	10-button sets.....	8	6	-----	62.40	59.00	3 3.40	3 6
E ²	10-button sets.....	6	8	-----	65.70	63.50	3 2.20	3 4
F	Key sets ⁴	5	10	-----	72.25	57.00	3 15.25	3 21
G ²	Call directors.....	10	-----	5	109.00	82.50	3 26.50	3 24.3
H ²	Mixed ⁵	11	8	3	115.10	91.75	3 23.35	3 20
I	10-button sets ⁴	8	18	-----	203.70	125.00	3 78.70	3 38.6
J ²	Call directors.....	10	-----	10	218.00	132.50	3 85.50	3 39
K ²	Call directors.....	13	-----	10	275.00	142.25	3 132.75	3 48
L ²	Mixed.....	15	2	10	330.60	155.25	3 175.35	3 53
M	Call directors ⁴	11	-----	18	426.60	215.75	3 211.00	3 49.5

¹ Present rates assume PHL service. All instruments pick up all lines except 3-PHL service was used for key sets with mixed systems. Extension charges at \$1.65.

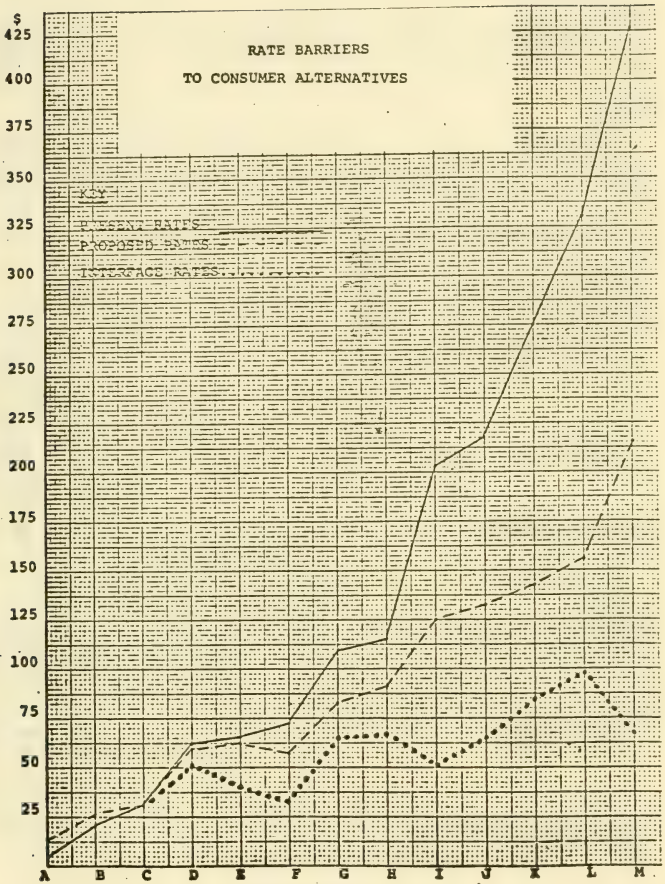
² Sources: Exhibit A-16, p. 11; exhibit I-58.

³ Decrease.

⁴ Typical interconnect system.

⁵ Includes a 10-button set.

EXHIBIT 53A



Key rates for systems F, I, and M

Reference F:

5 key set lines

10 locations

Present:

10 at \$6.40..... \$64. 00

5 at \$1.65..... 8. 25

72. 25

Proposed:

10 at \$3.25..... \$32. 50

5 at \$3.25..... 16. 25

5 at \$1.65..... 8. 25

57. 00

21 percent decrease..... 15. 25

Reference I:

8, 10-button set lines

10 locations

Present:

144 picks at \$1.30..... 187. 20

10 extensions at \$1.65..... 16. 50

203. 70

Proposed:

8 at \$3.25..... 26. 00

18 at \$5.50..... 99. 00

125. 00

38.6 percent decrease..... 78. 70

Reference M:

11 call director lines

18 locations

Present:

18 C.D. at \$2.80..... 50. 40

198 pickups at \$1.90..... 376. 20

426. 60

Proposed:

18 C.D. at \$10..... 180. 00

11 lines at \$3.25..... 35. 75

215. 75

49 percent decrease..... 210. 85

NOTE.—Interface rates for all systems are at \$6.50 per line.

Exhibit 54**HAMMING—CROSS**

* * * * *

on the strength of our good service and maintenance or on our overall Company reputation.

"In fact, 87 percent of the customers who choose Michigan Bell say service, maintenance or Company reputation is a deciding factor."

Now, was that the kind of information that you used when you indicated that your rate structuring, rate restructuring, was designed to reflect competitive bidding?

A. No, sir.

Q. Do you not agree that that is information which bears on competitive conditions?

A. I do not keep up with the Marketing Department's figures or the way they calculate how many they win or lose, and I did not use this information other than the general knowledge that we are losing competition in certain areas.

Q. But did you also use the general knowledge that you were winning more than you were losing?

A. I knew that, so I used that.

EXAMINER SHERIDAN. I might as well make a statement on the record.

I don't want the fact that I might rule a little bit loosely, at least from my viewpoint, in regards to allowing this type of testimony in as an endorsement by me of its validity.

As I stated from the beginning of this case, I have a great deal of difficulty with even the presence of the interconnect people in here as competitors. I have doubt in my mind whether the Commission should even concern itself with any competitive effect of the rate structures presented by the Applicant; in other words, I have a lot of doubt that we don't really care what the competitive effect is—at least a serious question in my mind what and a serious question whether we should care what the competitive effect is, if we find the rates to be reasonable.

Now, as I stated in ruling on the interconnects' petition for intervention, I said that I was allowing them in the case in order to make a more full and complete record in this case, and I just don't want any of my rulings along this line to possibly lull them to sleep.

Mr. BUCHEN. Or encourage us too much.

EXAMINER SHERIDAN. Yes. Because the witness has made some comments in regards to competition in setting his rates, I probably more on that basis than any other basis have allowed some of this testimony in.

You may proceed.

Mr. BUCHEN. I appreciate, your Honor, and I feel that cross-examination, trying to stick to direct testimony, if we don't score our points now, they can't be considered by the Commission.

EXAMINER SHERIDAN. I am cognizant of that.

Mr. KIVETT. May I make but one comment.

EXAMINER SHERIDAN. You may.

Mr. KIVETT. And I think this is what troubles me the most. It seems to me that Mr. Hamming may well have considered competition in designing rates; that is, he might well have as a motivation the designing of rates that are competitive, and in a competitive world, that is only reasonable, but that's not the question, it seems to me, the intervenors are suggesting is also before the Commission, namely, whether or not the effect upon competition of his rate proposal will be adverse as to them, and it is this which I feel is beyond the issues and scope of this case.

* * * * *

Exhibit 55

COMPETITIVE COUNTER,
September 1970.

COMPETITIVE COUNTER OBJECTIVE

Competitive Counter is designed to inform those on the "firing line" about current and pertinent items in the field of competition and interconnection. Publication will be regular and as frequent as necessary to discuss topics of current importance. The newsletter intends to live up to its name by supplying competitive trends that will enable you "count" or keep tabs on how we are doing in meeting competition. Information supplied on cases, competitors, and

strategy should help you "counter" competition. Finally, the primary objective of this newsletter will be to act as a "counter" for the exchange of information. By sharing your plans in products, pricing, filings, strategy, training, etc., others will benefit and it is hoped use some of the ideas discussed to help their efforts in the competitive market place. We need to hear from you concerning your activities and plans in the competitive area; i.e., cases (won or lost), techniques, strategies that others could benefit from knowing about, or comments that you have about the Competitive Counter. This newsletter will only be as good as your contribution to it!

Send your items of interest to Rick Nye, Room 2037B, 195 Broadway or call him on 212 393-4416.

SALES OPERATION GROUP—COMPETITIVE PLANS

Several plans and projects are now underway or are on the drawing boards to help the Companies in their efforts to meet competition. We would also be interested in hearing your thoughts through your Company's Competition Coordinator. Our immediate plans are to:

Maintain "Competitive Counter" on a continuing basis to exchange plans and ideas.

Establish and maintain reference files on competitors.

Establish an information desk to function as liaison with Competitive Coordinators in the Companies.

Continue and become more sophisticated in competitive tracking and analysis.

Conduct market research studies in order to provide information and direction in formulating market strategies.

BUSINESS CUSTOMER COMPETITION STUDY

A market research study is being conducted in a cooperative effort between the Sales Operation section and the Market Research Group at '195'. The study should answer many of the questions being asked today that we have been unable to answer. The study will be aimed at determining the

COMPARISON OF BELL AND NON-BELL FEATURES BINDER

The fourth update has been released containing revised information on Non-Bell switching systems. In addition, additional copies of the binder are being printed and distributed. The total distribution of the Comparison binder will be close to 2,500 copies. The Sales Operations Training Group has reviewed suggestions from the Companies and though many of the thoughts were included in the revised format, of those changes not included, the most pressing seemed to be pictures of competitive gear, computerizing the information, a section on data modems. Pictures of some of the most commonly used competitive equipment have been obtained and were included in the third update.

The possibility of using the Otsego project to computerize the information was investigated but we were informed that this kind of program was not feasible. However, the Service and Costs people here at "195" have developed a program which will select and review the information contained in the PBX section.

Western has information on Data Modems and can provide it when personnel are available. Because of the uncertainty and time lag involved in getting the information out, some of the Companies have indicated that the Auerbach Data Communication Reports would probably serve this purpose effectively.

HOTEL/MOTEL STUDY

A systemwide study of the Hotel/Motel market was conducted earlier in 1970. As many of you are aware, about 30% of our losses in PBX's have occurred in Hotel/Motel market. As a result of this trend and because of the steady growth of this industry a study was conducted and completed in May 1970.

The industry is significant in terms of size since it is estimated that the industry will reach 80,000 properties by the end of 1970. PBX systems serve 40,000 properties (6,000 guest dial), growth is 3,000 new properties each year, and 5,000 existing properties are involved in guest room expansions.

Bell provides 32,000 PBX's to the industry (21% of our PBX market) of which 4,800 are dial (7% of our dial PBX market). Bell's annual billing to the market is over \$300 million. Loss of the total market would mean about a 50% loss in revenue and we would continue to pay commissions.

A further reason for us to conduct the study is that the industry has expressed some dissatisfaction with us in the past on rates, commission treatment, and the type equipment we provide.

In order to recommend the direction that Bell should follow in the Hotel/Motel Industry, the study was conducted to determine:

What were the determining factors that caused customers to obtain service from an outside supplier?

What must the Bell System do to meet the service demands of this industry?

What are the problems involved in the Industry/Bell System relationship?

What is the System's market area of vulnerability?

What time frame must be established for the System to act with the Hotel/Motel Industry?

In an effort to collect all the data required to meet our objectives, contacts were arranged with a representative group from the Hotel/Motel Industry and Associations, A.T.&T., Western Electric, and Associated Companies. A personal interview technique, both individual and group, was employed with the interviews ranging from one-half to three hours.

The study concluded in part that there are numerous related problems that confront the Bell System and the Industry. While many of these problems can be eliminated with understanding and cooperation from both parties, there is a definite degree of urgency for solutions on others.

In the competitive area the determining factors that caused customers to obtain service from outside communications suppliers are as follows not necessarily in order of importance but all inclusive:

The excessive amount of equipment space required for the 701 PBX.

Monthly recurring charges remain constant and seldom decrease.

Bell System does not offer flexible service contract agreements and optional pricing plans.

Customers desire for console attendant position without incurring additional expense.

The additional charge for color phones.

Outside suppliers offer shorter installation intervals than the Associated Companies.

Outside suppliers equipment requires much less floor space than the 701 of equal station size.

Outside suppliers equipment is housed in a cabinet enabling it to be located in office areas or linen rooms, etc.

Outside suppliers offer flexible contract agreements and payment plans with options to lease and/or purchase.

The Industry's disappointment with the Bell System for our "passive resistance" in dealing with long standing Industry/System problems.

The aggressiveness of the outside suppliers sales organization.

As a result of the information collected the task force recommended:

Immediate provision of a dial system designed to the "Specifications" of this market.

New rate structure based upon more realistic location life and low maintenance of a hotel-motel dial PBX system.

Flexible contract service agreements and payment plan options designed to offer customers a choice based upon their needs and economic conditions.

Vitalization and training of Associated Companies to be aware of Industry/System problems and take action to solve them.

Issuance of Industry guidelines by AT&T to provide conformity for the Associated Companies.

A reevaluation of the Hotel-Motel 701 dial PBX offering and make a recommendation to the System.

Immediately establish an interdepartmental AT&T task force to initiate, direct and follow-up a course of action to meet the service requirements and solve problem areas in the hotel-motel industry.

NATIONAL ACADEMY OF SCIENCES' REPORT TO THE F.C.C.—JUNE, 1970

The National Academy of Sciences was retained by the F.C.C.'s Common Carrier Bureau following their decision to allow revised tariffs, featuring our current interconnection provisions, to go into effect. They were to evaluate:

Propriety of Telephone Company-provided network control signalling requirements and various alternatives to the provision thereof by the Telephone Company,

The necessity and characteristics of Telephone Company-provided connecting arrangements and various alternatives to the provision thereof by the Telephone Company, and

Basic standards and specifications for interconnection and the appropriate method to administer them.

The product of this panel's efforts is embodied in a 77 page, highly technical assembly of information entitled, "Report of a Technical Analysis of Common Carrier/User Interconnection".

Among many others, three basic conclusions were reached:

Exhibit 56

AUGUST 1, 1972.

During our meeting of July 18, 1972, we addressed ourselves to the problem "How can we increase our 'wins'?" Following is a summary of the discussion emanating from the critical areas we explored:

IMPROVING MARKET COVERAGE (COVERING MORE OF THE MARKET AREA EFFECTIVELY)

PRESENT STATUS OF MARKET COVERAGE

Limited programs are being carried out in the BX areas on a scheduled basis with our most vulnerable markets (756's, Manual PBX, Call Directors). Man-power constraints prohibit adequate coverage of Key and Call Director markets. Concern was expressed for our ability to hold onto these accounts without some "breakthrough" on available force.

Phone-Power type contacts and Expanded Market Strategy programs are being utilized when time and force permit.

Traffic's cooperation on studies and their customer evaluation referral procedure provide significant assistance in implementing coverage.

Busy studies in some areas are running 5-10 weeks.

Deterioration in maintenance and repair services is still a serious deterrent to required follow-through on customer servicing.

NEEDS TO BE MET

Evaluation of Marketing and Commercial job responsibilities and organizational structure for more effective use of force and abilities. Job descriptions tend to limit the maximizing of productivity; e.g. Salesmen are performing some tasks which should be delegated. Clerical forces, although fully qualified and capable, are restricted from handling those types of work.

Tie-in of Traffic-Business Service studies and a Plant physical check program with a Marketing coverage plan.

Guidelines for determining contact procedures—when, where, and how to best use advertising, mail, brochures, phone, follow-up activity.

Distribution and review of the Dodge Reports needs examination.

Evaluate the Architects and Builders group printouts for new building and expansion. Southfield is currently using this as a valuable source for local time in meeting competitive situations as well as normal customer demands.

Notification to the Field of use of Traffic's TMS machine for identification of problems. (Types of studies which can be made should be ascertained).

A firm Company commitment to support competitive efforts. "Do we want to compete for the market? Or, do we want to get out of the business? If the former, take a firm stance and provide us with the necessary tools to compete. Current lack of direction is demoralizing and confusing to craft and contact people." (Group feels that this contributes to force losses, etc.).

SELLING MORE EFFECTIVELY

NEW RESOURCES AVAILABLE

Intermediate training in PBX.

New System PBX reference manuals will be placed in each crew by August, 1972.

New economic analyses (Discounted Cash Flow) should be made available by the end of August. Training will be developed for the Field on interpretation of these programs and Staff will coordinate in providing an authoritative person to consult with on any problems which arise.

NEEDS TO BE MET

Modular training segments on equipment and products made available on an ongoing basis.

Scattered and incomplete information on equipment brought together for reference source.

Comprehensive competitive equipment binder supplied.

Offer competition seminars for exchange of ideas and update on competitor strategies.

Provide a *resource center* (i.e. expansion of competitive coordination concept)—a term of experts rather than trying to make each salesman an expert, for pursuing and supplying definitive and accurate information on equipment, economic analyses, sales strategies, tax matters, etc.

Provide interconnection specialists to follow through on lost cases, implementing interface devices, directory changes, etc.

FILL IN PRODUCT VOIDS

Immediate needs are seen in:

All calls transfer (all PBX's and Centrex)

Expanded Main/Satellite service or released loop for Centrex customers with multiple locations.

Centrex unbundling on PET application. (Have filed)

Alleviating restrictive thinking on capabilities and alternatives of Centrex concepts; i.e. PBX-C.O. Competitive switchers coming from Litcom, Westcom, and Northern Electric dictate moving out rapidly on expanded Centrex offerings.

Key system features:

more flexibility

greater ICL capacity

paging

automatic button restoral

D.S.S.

spokesman housing a busy lamp field

10-button wall set

increased station user identification (ala Bechtel case)

add-on conference equipment with C.O. lines

capability of competing with Nitsuko and Meisei lines

Special industry voids

Hospital market—we have nothing to meet needs for medical and non-medical emergency paging; Dr. registry, picturephone and CRT devices. With HEW pressuring for efficiency and growing consolidation of hospitals, our competitors will supply the needed sophisticated communications services.

Hotel/Motel—Key pulsing for attendant console; code restriction; and lobby paging.

PRICING MORE COMPETITIVELY

Immediate needs are seen in:

Updating our rate making policies to get rates in line with costs.

Focusing initially on Hotel/Motel rates for specialized requirements—we are extremely vulnerable in this market.

Illustratively

Competitive systems generally have a form of toll diverting within the switcher. The additional charge, if any, for this option is usually quite 'nominal. MLT presently charges \$83.75 per month for toll diversion even if the serving vehicle (i.e. 770 PBX) is capable of providing this feature at limited or no cost.

Presently MBT charges \$.30 per month per station for corresponding room and station numbers while our competitors provide this at no additional charge.

OFFER PAYMENT FLEXIBILITY

We need *fast action* on optional payment arrangements, such as:

Pacific Northwest Bell's incremental discount plan based on location life of Dial PBX systems.

Improved flexibility on short run contracts for new (easily installed) equipment; i.e. customer who plans to move in less than five years and is willing to pay move charges—not both termination and move charges.

Advanced payment and maintenance payment option plans.

GENERAL CONSIDERATIONS

A need exists to keep employees informed of competition and to stimulate interest and commitment.

Staff need for more competitive information from the Field by way of proposals, brochures, contracts, etc.

A need for concerted effort dedicated to have the Hotel/Motel market—some charges are out of line and features are lacking.

"A need for *quick* action, not promises for 1975 which may materialize but too late." (Several references were made by the group relating to this point).

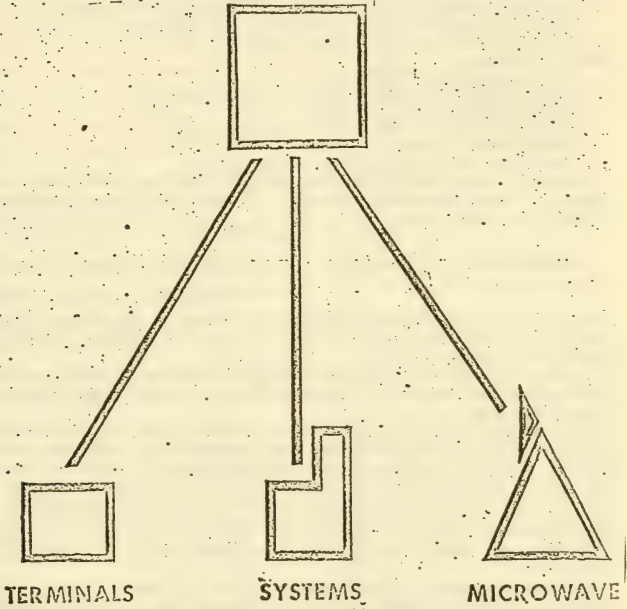
These were the most relevant points in which we felt you all shared an interest. If there are others which we missed, please let me know so that they can be included in our list.

It is recognized that many of the problems we explored in our November, 1971 meeting remain unresolved and are of even greater urgency today if we hope to attain a favorable competitive position before we experience the total loss of some markets.

Given your expressions of concern we will continue to work towards expeditious answers to our most compelling needs.

F. W. SULLIVAN.

EXHIBIT 56A

INTERCONNECTION**BELL
NETWORK**

OUR ACTION PLAN

We must develop a detailed plan of action that is designed to permit successful operation in a new competitive climate.

We need to improve on a broad front:

Product Line:

- Tuned to customer needs
- If we can't develop—buy on the outside
- No "Gold Plating"

Pricing:

- Flexible competitive profitable and easily changed

Installation & Maintenance:

- Intervals to suit customers
- Quality work
- Good Company image by employees

Billing:

- Accurate and in a format and detail to suit customers

Service Measurements:

- Business customer by market, type of service and individually
- Indices for business market separate from residence
- Introduce SAM for all business customers

Market Coverage:

- See customers more often
- Review those customers to whom we have said no
- Review manual PBX customers
- Special attention to vulnerable industry groups
- Review sales policies
- More advertising directed to business market

Moreover, since over half of our business revenues come from PBX customers, it makes good sense to accord this group some extra special treatment on all of the above areas.

Exhibit 57

MEMORANDUM—OUTSIDE CONSULTANT ACTIVITIES, TELEPHONE POWER, INC.

GRAND RAPIDS, August 20, 1970.

The attached lists business accounts subscribed to date for the consulting services of Telephone Power, Inc., a firm started in September 1969 by three former MBT employees.

Until early July 1970, they were primarily dedicated to study and consultation services and caused us minimal difficulty in cases where "head-to-head" competition arose.

Early in July, they were awarded the distributorship for Stromberg-Carlson private telephone system equipment for the state. Since that time, they began directing their efforts toward opportunities to sell terminal gear. A greater number of customers are now signing contracts with them (15 since mid-July), some who previously agreed to stick with us, but we understand they offer these services "free" as their means of determining saleable situations, and ultimately proposing a sale or lease equipment plan on an interconnected basis. This was told to our people by one customer and also by one of TPI's officers.

The greatest impact, thus far, has been the inordinate amount of time required of Marketing people in providing information to TPI concerning the accounts they represent.

As far as loss of business, only one interconnected trunk line, at the TPI office, has been installed. Pending firm requests include three more lines at TPI offices, a change-over to Stromberg key equipment at WLAV from our 755 PBX, and interconnection of a residence line at the home of TPI's president.

During the past week, in a direct confrontation with a Holiday Inn, under construction, we sold our complete Hotel/Motel dial package with 160 stations. TPI was attempting to sell a Stromberg-Carlson system.

Many inquiries are in process for the accounts they represent, i.e., quotes for purchase/lease of our cable facilities, DID availability for some of their clients, and miscellaneous requests concerning availability of interconnection units.

Marketing is currently reviewing our entire position with regard to our coordination obligations in consultant situations and the advisability of initiating new contact or mail activities with our customers to ensure optimum rapport.

For the past several months, we have been actively pursuing a company initiated contact program, particularly with accounts felt to be most vulnerable. However, it is virtually impossible to circumvent "free" study contracts.

One final thought is that we should seriously consider all legal means of limiting the types and amount of data supplied consultants; possibly establishing a contingency charge for studies that go beyond what our normal activities might be in any situation where they cause us extra work.

E. F. GIETZEN,
Marketing.

TPI CONTRACTS

Account	Location	Telephone No.	Type service	TPI contract period	Remarks
Almanac Newspapers	G.R.	534-7638	Key	Aug. 6, 1970 to Sept. 5, 1970.	Free.
Bissell, Inc.	G.R.	453-4451	100S 701	July 28, 1970 to Jan. 28, 1971.	Do.
Blue Arrow Douglas	G.R.	241-1631	756	Mar. 4, 1970 to Mar. 31, 1970.	
Borgess Hospital	Kzoo	349-1581	100S 701	Dec. 1, 1969 to Dec. 1, 1970.	MBT sold CTX.
Bronson Hospital	Kzoo	382-2000	100S 701	Dec. 1, 1970 to Jan. 13, 1970.	Do.
Calvin College	G.R.	949-4000	100S 701	Oct. 9, 1969 to Apr. 30, 1971.	MBT CTX approved.
Chemtron	Holland	392-2391	300S 701B	Oct. 16, 1969 to Apr. 16, 1970.	
Orson E. Coe Pontiac	Ionia	527-2000	Key	Dec. 1, 1969 to Dec. 21, 1970.	
Do	G.R.	245-1106	Man 555		
Commercial Equipment Corp.	G.R.	456-7201	Key	May 7, 1970 to Aug. 7, 1970.	
Donnelly Mirrors	Holland	396-1441	300S 757	Oct. 6, 1969 to Apr. 30, 1970.	Re-signed with TPI.
Dutcher Realty	G.R.	245-0421	100 key cabinets	Mar. 31, 1970 to June 31, 1970.	MBT renewed contract.
Eberhard Foods	G.R.	452-6071	756	May 1, 1970 to Apr. 31, 1970.	
Easttown Sound	G.R.	459-3327	Key	Aug. 4, 1970 to Aug. 4, 1971.	Free.
Ferguson-Droste-Ferguson	G.R.	456-8521	100S 701	Apr. 30, 1970 to July 30, 1970.	
Ferris State College	Big Rps	796-9971	100S 701	Dec. 1, 1969 to Nov. 26, 1971.	
Gantos Stores	G.R.	949-7000	756	July 8, 1970 to Jan. 8, 1971.	Free.
G. R. Alloys	G.R.	532-2301	Key	July 24, 1970 to Jan. 24, 1971.	Do.
G. R. Metalcraft	G.R.	456-7101	100S 740	Oct. 24, 1969 to Oct. 23, 1970.	
Greenville Daily News	Greenville	754-5641	Key	Aug. 3, 1970 to Feb. 3, 1971.	
Grocer's Dairy	G.R.	245-2104	300S 800A	Apr. 15, 1970 to Apr. 14, 1971.	
Grotenhuis Underwriters	G.R.	451-0731	Key	July 31, 1970 to Jan. 31, 1971.	Free
Herpolsheimer's	G.R.	459-5119	100S 701	May 1, 1970 to June 30, 1970.	
Howard Johnson Motor Lodge	G.R.	452-5141	100S 701	July 25, 1970 to Oct. 25, 1970.	Free.
Independent Liberty Life Ins.	G.R.	451-0601	756	Apr. 27, 1970 to Apr. 27, 1971.	
Interstate System	G.R.	452-5121	100S 701	Aug. 5, 1970 to Dec. 31, 1970.	Free.
Job Finders of G.R.	G.R.	949-7080	Key	Dec. 29, 1969 to Mar. 29, 1970.	
Lear Siegler Credit Union	G.R.	241-3615	Key	Aug. 7, 1970 to Feb. 7, 1971.	
Lear Siegler, Inc.	G.R.	241-7000	CTX I C.U.	Nov. 3, 1969 to Nov. 2, 1970.	Billing checks on.
Marcus, McCroskey etc Attnys.	G.R.	454-9457	755	Oct. 16, 1969 to July 1, 1970.	
Modern Partitions	Holland	396-2305	756	July 10, 1970 to Jan. 10, 1971.	Free.

TPI CONTRACTS—Continued

Account	Location	Telephone No.	Type service	TPI contract period	Remarks
Northern Air Service	G.R.	949-5000	300S 800A	July 28, 1970 to Jan. 28, 1971.	Do.
Oliver Machinery	G.R.	456-1591	100S 701	Oct. 24, 1969 to Apr. 24, 1970.	
Louis Padnos Iron & Metal.	Holland	396-6521	Key	July 22, 1970 to Jan. 22, 1971.	Free.
Penn Mutual Life Ins.	G.R.	459-6241	755	July 1, 1970 to July 1, 1971.	
Shepard Broadcasting	G.R.	456-5461	755	June 22, 1970 to Dec. 22, 1970.	Suspect financial interest in TPI.
Staal Buick	G.R.	452-5101	300S 800A	July 28, 1970 to Jan. 28, 1971.	Free.
Tassell Industries	G.R.	453-2421	100S 701		
West Michigan Telecasters.	G.R.	459-3533	756	Aug. 3, 1970 to Dec. 31, 1970.	Do.
Withey Associates	G.R.	454-9421	Key	Sept. 17, 1969 to Mar. 17, 1970.	Company since been taken over-MBT control.
Wolverine World Wide	Rockford	866-1561	100S 701	Aug. 11, 1970 to Feb. 11, 1971.	Free.

OTHER CONSULTANTS

Account	Location	Telephone No.	Type service	Contract period	Remarks
Loudon Motor Freight	Kzoo	343-1695			Nat. Elec. Service Corp
Brown & Sons	G.R.	459-4206	755	June 23, 1970 to Aug. 1, 1970.	ITT (Terryphone).
Denver Corp	Gd. Haven	842-0200	Man-555	Oct. 15, 1969 to ?	Nat. Elec. Service Corp.
Transfer Lines	G.R.	241-3601	Key	Feb. 13, 1970 to ?	Comm. Consult Inc
Annuity Life Insur	G.R.	245-2297	Key	May 26, 1970 to ?	Comm. Consult Inc.

[American Telephone and Telegraph Company 1969 Printed in U.S.A.]

A balanced judgment should help assure good customer service, as well as profitable Telephone Company operations.

PRIORITIES

Scheduling dates and times for customer contacts is generally based upon one or any combination of the following criteria:

- Degree of urgency with which the customer must be served
- Independent consultant activity, relocations, emergencies, etc.
- Revenue potential—immediate, short, and long term
- Revenue protection
- Competitive activity by outside suppliers
- Sensitivity of the Industry and Account
- Customer attitudes
- V.I.P. or "Political" Significance
- Position in Industry or Community
- Company Profitability—prudent use of capital and expenses

QUALIFICATION CONSIDERATIONS

As the manager and salesman pursue either the qualification of a market or an account, many types of information are analyzed. The following categorizes and lists examples of a number of characteristics and sources of this information. It is by no means an attempt to create an exhaustive list. Neither is it an attempt to indicate a process to be applied across the board.

National Economic Data—Trends and status of national economy acquired from newspapers, magazines, radio, T.V., Federal publications, etc.

Local Economic Data—Trends and status of local economy acquired from newspapers, radio, T.V., State and City publications, Chambers of Commerce,

County and City Planning Commission Reports, County Industrial Development Committees, etc.

Industrial Data—Trends, problems, status, and leadership patterns of specific industry groups acquired from:

Newspapers—public and industry

Magazines—public and industry

Attendance at Industry conventions and conferences as appropriate

In the establishment of National and Local Economic Data and Industrial Data, as coordinated *staff effort* can help to assure that complete current data is supplied to sales managers.

CUSTOMER INFORMATION FILE

Certain indications of potential can frequently be uncovered by reviewing the following:

Historical and present financial health of the company.

Customer Objectives and Attitudes concerning competition, profitability, growth, public acceptance, government acceptance, etc.

Customer orientation to profitability through growth in sales volumes.

Degree to which customer operations are directed toward increasing their share of the competitive market via new products and services and/or changes in organizational structures. (Mergers, acquisitions, geographical expansion)

Degree to which customer operations are directed toward diversification of operations. (Operating in new and different markets)

Customer desires to solve problems in functions such as distribution (including improved services), production, administration, credit and collections. This might include changes in operations to new and unfamiliar functions e.g., programmed/automated production lines, and installation of Business Information Systems.

Recent or proposed extended lines of communication (nationwide, worldwide).

Plans for increased delegation of authority (branches, plants).

Changes in top management which might indicate changes in policy.

Indications of increased dependence upon others for information e.g., government agencies, trade associations, universities.

Use or intended use of computers—purchase, rental, time sharing, computer utilities.

Plans for attending and reactions to the Bell System Business Communications Seminar.

Known present and planned customer communications activity e.g., usage, toll, mail, messenger, signalling, record, data, visual.

Obvious communications equipment and service voids, as well as equipment inadequacies (saturation points, etc.).

Miscellaneous data—Information acquired from:

Special studies—A.T.&T., Company, and others

Specialist Groups—A.T.&T. and Company Staffs

Other Departments—Commercial, Plant, Engineering, Customer Service Groups

Information derived from employee participation in Business, Professional, and Service Organizations

Other Appropriate Sources

RECORDING AND ORGANIZING INFORMATION

After examining the appropriate customers in the market and the segments of certain accounts, a priority must be assigned to each customer and each segment of larger customers. This priority guide or plan evolves into a Market Program which generally includes a summary sheet (or Market Qualification worksheet) for each customer and segment. This summary includes:

Customer objectives

Service and equipment voids and inadequacies (saturation points, etc.)

Trends—Industry, Economic

Analytical information

Customer locations

Company objectives

Activities—Rough estimate**Time Requirements—Rough estimate**

This summary sheet should provide adequate information to indicate how customer objectives and company objectives relate, as well as what the customer and the company will gain by any given course of action. The manager, with the assistance of other groups and departments, should evaluate costs—capital and expenses, and should weigh these costs against situations which exist that might tend to override costs and revenue considerations. Balanced judgment is the key to profitable Market Qualification.

SUMMARY

It is important to evaluate trends, changes, and current operating status of all appropriate locations and segments of large accounts. The exclusion of a significant location or segment could adversely affect the accuracy of the qualification process.

Qualification judgments based solely upon one piece of information, e.g., current usage or equipment saturation should be avoided. Nothing is as effective as the solid balanced judgment of a manager or specialist. Upon the completion of the review, he will have qualified his market, account, or accounts, and will be in a position to plan his future activities based upon realistic opportunities to satisfy customer needs that have been identified.

Exhibit 58

[American Telephone and Telegraph Company 1969 Printed in U.S.A.]

MARKET QUALIFICATION**DEFINITION**

Market Qualification is the process of examining in detail appropriate customers or segments of customer accounts in order to select those best suited for analytical contact work. This qualification produces the objectives for analytical work. As a by-product, it identifies those customers most apt to generate significant requirements.

PURPOSE

The process of Market Qualification provides the manager and account manager with an approach by which customers or segments of large customer accounts (divisions, departments, functions, subsidiaries) can be scheduled for contact. This scheduling includes Company-initiated as well as Customer-initiated (Prime Demand) activity. Further, objectives, timing, numbers and skills of personnel assigned, and methods involved in the contact, can be formulated.

PROCEDURE**Reviews**

Initial.—After Market Identification has been accomplished, an initial case-by-case review must be completed. This involves examining all appropriate identified customers in a specified geographical area to determine a program for contacting individual customer accounts for analytical work.

Also, certain appropriate larger accounts should be reviewed—segment by segment, and location-by-location—to formulate a program for analytical contact.

An initial review of 100% of the identified market is normally compiled only one time.

Annual.—After the initial review, only part of the market (account by account) or a large account (location by location, segment by segment) need be examined on an annual basis. Through initial and later annual reviews will disqualify customers or segments of large customer accounts from being scheduled for analytical contact work. These reviews also permit scheduling analytical contact work for the future. In either event, more current data might indicate a necessity for rescheduling the customer or segment for contact. Therefore, it is *not* necessary to review these specific customers or segments annually.

The accuracy and effectiveness of the annual review is directly related to the *continued updating of Customer Information Files*. This updating of customer information permits the qualification process to continue on a daily basis. Therefore, the qualifying process is dynamic rather than static. Work Reviews furnish the manager with ideal opportunities to continually qualify the market. As a result, the annual review is a summary upon which an annual market program can be based.

Team Approach.—Market Qualification is generally accomplished by the manager and the salesman most familiar with an account or segment of a large account. This two man team approach must be broadened at times to include other appropriate salesmen, specialists, and representatives from other Associated Companies and Long Lines.

Team concept dictates that decisions be made concerning the primary responsibility for handling national accounts and regional accounts (operating in contiguous areas or states). To assure effective customer handling, decisions fixing this responsibility should be negotiated by those with the final authority to make these decisions in the Associated Companies and Long Lines.

Qualification Judgments and Priorities

Judgments.—Customer operational problems and objectives must be considered in combination with Telephone Company requirements.

Exhibit 59

Illegible. Retained in subcommittee files.

Exhibit 60

MEMORANDUM

INDEPENDENT COMMUNICATIONS CONSULTANT ACTIVITY

This is to relate the method of operation in outside consultant activity which the newly formed Telephone Power, Inc. of Grand Rapids apparently intends to employ.

Telephone Power, Inc. is the firm established by three recently resigned MBT Marketing people.

As a result of a proposal by the above firm last week, we met with officials of a large dial account customer in Grand Rapids to discuss our abilities in terms of total communications advisory service. Following are the highlights of our eight point action program the customer agreed to in lieu of retaining the outside consultant firm.

Each point listed ties in directly with areas of interest in which the consulting firm apparently offered continuing surveillance. It seems obvious that the consultant firm was attempting to contract their services as a total communications adviser which, for the most part, would be fulfilled by their directing MBT activities in areas of study which are normally available to our customers (but not consistently and uniformly completed on a scheduled basis).

1. Central Office Monitoring of Calls and On Premises Visit to Review Switchboard Operations (Traffic)

Central Office monitoring will be made during September 1969, and then on an "as needed" basis, with a minimum of every six months.

On premises observations will be done during September 1969, and then on an "as needed" basis with an objective minimum of one per quarter.

There will be a review with the customer of the findings and a course of action planned after each monitoring and visit.

2. Busy Studies

A Busy Study will be conducted during the week of September 8, 1969. Future studies will be conducted on an "as needed" basis, including reviews of data such as the ATB (All Trunk Busy) and LTB (Last Trunk Busy) readings with a minimum of one per quarter.

3. WATS

A mechanized computer study will be completed during September 1969, the results of which will be reviewed about the first of October. Future studies will

be run "as needed" to be determined by changes in operation, increased calling, etc., or at the customer's request.

4. Departmental Review

A thorough review of the Order Department and customer service department will begin on September 8, 1969; a switchboard operators review will be completed by September 16, 1969; certain other departments will be reviewed at a later date after discussion and appropriate times are mutually agreed upon. Future reviews will be conducted on an "as needed" basis.

5. Worksheets

Current copies of all worksheets were delivered on September 3, 1969. Future copies will be forwarded upon issuance.

6. Single Billing Record

A copy of the July 25 SBR was given to the customer on September 3, and the August copy was mailed on September 4. Future copies will be mailed directly to the customer on an "as issued" basis, normally once per month in this case.

7. New Equipment Lines

New equipment will be discussed on a "day to day" visit basis, and a quarterly general discussion is programmed to review what is available and what is in the process of development.

8. Future Growth

As a part of this program, we will jointly forecast future needs well in advance to enable proper recommendations and processing of equipment orders to avoid critical situations. Particular attention will be paid to the Data field, and Centrex feasibility. We will arrange for a joint meeting with a Data expert within the next 30 days.

The customer accepted the entire program and stated that he was pleased that they would not be required to engage an outside firm to oversee their telephone communications services.

E. F. GIETZEN,
September 8, 1969.

Exhibit 60A

Mr. EGAN: The following represents the activity we have had with Telephone Power Incorporated as regards their handling of the Ferris State College and the Calvin College accounts.

Ferris College—Big Rapids: 100 Series (701) 2 Pos 552, 281 Stations, 175 Extensions, 28 Trunks, 18 Manual PBX's in dorms (507's and 555's).

Telephone Power Incorporated contracts effective December 1, 1969 through November 26, 1971.

Basic information on account requested by Telephone Power Incorporated and provided early 1970.

Normal activity since that time conducted through regular College people.

30 station dial addition pending—approximate completion week of May 25.

No other significant happenings.

Calvin College—Grand Rapids: 100 Series (701) 1 Pos 552, 359 Stations, 83 Extensions, 17 Trunks, 1-555 Manual PBX in Dorm—13 stations, 1-756 PBX for Administration—54 stations.

Telephone Power Incorporated contracts effective October 9, 1969 through April 30, 1971.

Basic information on account requested by TPI and provided November, 1969.

Major activity has involved billing checks.

\$825.71 overbilling found.

\$825.00 underbilling found.

Net difference \$.71 in favor of customer.

Minimal order activity since that time negotiated through TPI.

Pending jobs.

Second Position 552 on the 701 system. When completed approximately September 1, 1970 756 and 555 will be removed.

280 station dial addition on the 701 system.

Also pending Centrex feasibility study—probable Engineering answer June 1.

TPI indicated if we cannot provide, customer will go to private Centrex system on Interconnection basis. Interconnection query through normal sources is pending.

Exhibit 60B

JUNE 25, 1970.

Mr. SHAW: This concerns outside consultant and supplier activity in the Southern District.

Following is a list of consultants and suppliers and their customers:

Telephone Power, Inc., communications consultants, Grand Rapids: Grand Rapids Osteopathic Hospital—Grand Rapids, Chemtron—Holland, Ferris State College—Big Rapids, Liberty Mutual Insurance—Grand Rapids, Calvin College—Grand Rapids, Blue Arrow Douglas—Grand Rapids, Dutcher Realty—Grand Rapids, Grocer's Dairy—Grand Rapids, Borgess Hospital—Kalamazoo, Eberhard's Foods—Grand Rapids, Herpolsheimer's Department Store—Grand Rapids, Coe-Hayden Pontiac—Ionia & Grand Rapids, Pennock Hospital—Hastings, Lear Siegler Inc.—Grand Rapids.

Sawyer Consultants, New York City: Michigan National Bank—Marshall.

Tate Communications, consultants, Lansing: Michigan National Bank—Grand Rapids.

Communications Consultants, Inc., Nashville, Tenn.: Associated Truck Lines—Grand Rapids.

Com-Co Consultants, Inc., Houston, Texas: Variable Annuity Life Insurance Co.—Grand Rapids.

Communications Management, Inc., communications consultants: Brown and Co.—Kalamazoo.

East Town Sound, Grand Rapids agent for Stromberg Carlson Intercoms: Only customers thus far are themselves.

ITT—Terry Phone, Grand Rapids: Brown and Sons—Grand Rapids, Conrad Co.—Holland. We have been successful in retaining our services thus far.

To date, the only firm which has caused us any problems has been Telephone Power, Inc. Their territory covers the entire state, and until recently their services have included consulting only. However, we recently were advised that they have received a state-wide distributorship for Stromberg-Carlson PBX's and key equipment. At this time we have no indication as to its scope of either their sales or servicing organization.

In their capacity as consultants, the firm has constantly been testing our attitude and policies. Examples are as follows:

Request for Tariff changes such as add-on conferencing for non-PBX customers, and toll terminals in student dormitories.

Request for policy decisions such as what we will do with interior cabling on our interconnection cases.

Submitted several interconnection inquiries such as 1A key, coin, and a manual PBX. Presently only the manual PBX on their premises is interconnected.

Requested a Centrex feasibility study for both Calvin and Ferris colleges with this inference that if we cannot provide Centrex, the customer will purchase a privately owned system.

If you have any further questions, please call me on 616-459-9776.

R. B. Fox.

Exhibit 61

MICHIGAN BELL TELEPHONE COMMERCIALS

FOLLOW THRU, it's important to a good golf game and even more important as a business practice, for follow thru shows you are interested in more than meeting customer needs for equipment. You are interested in making sure that what you supply works right, now, and for years to come, this is why follow thru is standard operating practice for the Michigan Bell team. A team of experts who can engineer and install a phone system designed specifically to meet your business needs, and they will stick with your job, really follow thru, providing all the years of service and maintenance you will need. So, to get the complete communication package you need think of the Bell team first, and don't hesitate to call your local Michigan Bell business office. . . .

SUNG (Between each commercial)—For a lifetime of service beyond the phone, call the Bell team first.

Are you getting the most from your communications equipment as a business tool? Maybe your business needs call for more than conventional telephones. Michigan Bell offers business customers a wide range of equipment to meet internal communication needs. Call Directors to centralize many different phone lines at a single desk. Conveniently located Extension phones save time and money and help you avoid missing important calls. Button phones let you hold a customer on a line while you quickly phone for needed information from an associate, and Speaker phones keep your mind on business when your hands are full. There is more, Michigan Bell offers a complete line of communication equipment to meet your needs and you know if we install it, we service it. . . .

Hours—all day Saturday, and up to 5:00 p.m. Sunday, Michigan Bell gives me a forty (40) percent discount.

LITTLE GIRL. Goalie, no wonder you're rich.

MAN. More some day, my dear.

Both man and little girl speak here. I couldn't understand either one of them.

Long range planning is one important factor in the continuing success of almost any business and almost any businessman knows that, yet it is surprising how many overlook the importance of the long view when selecting communications equipment. Remember that Michigan Bell communications equipment installed today will still be efficient years from now, for if something should need repair, Michigan Bell fixes it without additional expense or delay, using experience and know-how that has made us number one in communications. We are confident that when it comes to long run values, like maintenance at no extra charge, you will be glad to call the Bell team first. The Bell team means better business for you in the long view.

For a lifetime of service beyond the call, call the Bell team first. You probably know that already, but there is more to it than meets the eye. When these people invite him for service, he means it!

When your Michigan Bell business communications equipment man calls, it is just a start of a long happy relationship, one reason you may wish to be included in Michigan Bell's basic communication package. If we install it, we service it. If something stops working right even years from now, we'll put it right, using all the skill and experience we have in a company like Michigan Bell. Thinking of changing, adding to, or otherwise improving your communications equipment, think of Michigan Bell first. If we install it, we service it. That's why we say—(Singing Sentence).

You are a businessman and you are busy . . . wouldn't it be great if you could be a—

Well, now you can, in a manner of speaking, with a mobile telephone from Michigan Bell. For whatever business you are in, construction, agriculture, real estate, a lot of your working hours are spent in a car or truck . . . you'll want to have a mobile phone from Michigan Bell working for you. Expand your area of operation, sharpen your competitive edge, deliver fast dependable service with a mobile phone from Michigan Bell. There is no waiting for installation—none—no waiting for service either. If Michigan Bell installs it, we service it. And, depending on where you live, you can choose either dial or manual mobile service. So keep in touch, call your local Michigan Bell business office today.

Exhibit 62

BELL FEELS COMPETITION PINCH

(By Allan Sloan, Free Press Business Writer)

Michigan Bell is worried about something new—competition.

Bell, which has a monopoly in serving most of Michigan, is finding competition from companies that offer less expensive phone equipment.

The result, Michigan Bell President David Easlick said in an interview Tuesday, is that Michigan Bell lost \$1 million in business to competitors last year, and expects to lose \$2 million this year.

In the long run, he said, this will raise the price of phone service to most of Bell's customers, because the company will have to charge them higher rates to make up for the lost revenue.

As an example of lost business, Easlick said that Michigan Bell is losing an average of three switchboards every two weeks to companies replacing Bell equipment.

He also said Bell is losing substantial numbers of "key" phones—phones that have several lines, controlled by buttons.

Bell is losing those customers, Easlick said, because it traditionally has kept their rates high to subsidize service to other customers, such as home owners.

Because Federal Communications Commission decisions are making it easier for companies to market equipment to compete with Bell. "We're really starting to get hurt," Easlick said in the interview and in a speech in Birmingham earlier in the day.

He also repeated previous statements that Bell soon will ask the Michigan Public Service Commission for a rate increase.

In December, when the commission gave Bell only \$24.8 million of the \$30 million it was seeking, the company said it would ask for more money.

Easlick said Tuesday the request would be more than the last one—which would make it a record.

Exhibit 63

[January 4, 1974—Tie Lines]

COMPETITION

'We're for a system of communications that provides the best service for the most people at the lowest cost'

—DAVID K. EASLICK.

For what only a few customers want, the rest will have to pay—in the form of poorer service and higher rates. This warning about the possible consequences of further competition in the telecommunications field was sounded repeatedly in 1973 by the Bell System, independent telephone companies, and a number of state utility regulators.

CERTIFICATION

One aspect of competition that concerned them was and is certification. Proposals for certification being studied by the Federal Communications Commission would eliminate existing network protection requirements and substitute a code of standards covering the manufacture of terminal equipment. If this equipment was "certified" by some telephone equivalent of the electrical industry's Underwriters Laboratory, it could then be connected directly to the telephone network.

On the surface, it might seem like a reasonable idea for the telephone industry to develop and enforce a certification program somewhat similar to that used to evaluate the safety aspects of toasters and dishwashers. But under closer examination, the analogy between telephones and appliances falls apart. The important difference is that telephones are integral parts of a system, and appliances aren't. If a toaster fails, the trouble—no toast, or burnt toast—is confined to one household. If a "certified" telephone doesn't work, not just one customer but potentially a great many others on the network could be adversely affected. And, depending on the nature of the failure, the results could be tied-up lines, wrong numbers, and billing errors.

Because the harmful effects of malfunctioning telephone gear can be so widespread, any set of standards applied to the design and manufacture of telephone terminal gear would have to be very stringent. After careful study of the certification proposals now before the FCC, AT&T advised the Commission that besides being inadequate in their network protection provisions, the plans are cumbersome and unwieldy. And, if they were beefed up to provide adequate network protection, AT&T estimates that their costs—including charges to customers, manufacturers and taxpayers to defray inspection and enforcement expenses—could run from \$140 million to as high as \$210 million over the next five years. This is contrasted with the total projected tariff charges of \$58 million for telephone company-installed protective devices for the same period.

But the differences don't stop there. If some form of certification is ultimately sanctioned and then fails even slightly to provide the protection afforded by present connecting arrangements, the costs to customers will mount

sharply. According to AT&T studies, a one percent increase in ineffectiv calling attempts would add about \$75 million to the capital costs of the network, and about \$27 million to annual operating expenses. And evidence collected so far on the performance of customer-provided terminals suggests that fears of service deterioration with certification are well founded. Current data indicate that intercity private lines equipped with at least one customer-provided terminal generated trouble at a rate at least 50 percent higher than did lines equipped with telephone company-provided terminals only. And the trouble report rate on regular telephone lines for customer-provided terminals is more than 25 percent higher than on lines connected solely to telephone company-provided terminals.

SPECIALIZED COMMON CARRIERS

The other form of competition that the telephone companies voiced opposition to was specialized common carriers.

Once the Federal Communications Commission approved in 1971 the entry of specialized common carriers (SCC's) into the private line market, the SCC's quickly duplicated the high capacity routes of the Bell System and charged lower rates. On the Chicago to St. Louis route alone, MCI succeeded in luring 80 percent of the two-point private line business away from Long Lines.

The Bell System may be the immediate loser, but the average customer will surely be the ultimate loser. To the extent that revenues from private line services support the investment in plant shared with the regular switched network, their loss places a heavier earning requirement on regular toll services that can only be met with higher rates.

Said David K. Easlick, president of Michigan Bell, "We're for a system of communications that provides the best services for the most people at the lowest cost. We're against certification and the expansion of specialized common carriers—like MCI—because we believe they will result in poorer service for most people at higher cost. Our evidence shows that the only ones who would benefit from certification and the expansion of specialized common carriers would be some makers of equipment, some SCC's like MCI, and some businessmen who happen to be in favorable geographical locations.

"The real losers would be the rest of the American public."

The controversy promises to grow much hotter in 1974. And the Bell System hopes that those that will be most affected by the outcome—the main body of telephone customers—will be drawn into it and make their wishes heard.

Exhibit 64

Not suitable for printing. Retained in subcommittee files.

Exhibit 65

4. Maintenance center and storage area.
5. Tools and test equipment.
6. Transportation, if required.

The average annual cost of these items over the life at the system varies from 6% to 12% of installed (i.e., first costs), and an acceptable conservative figure is 8%. The attached exhibit "General Maintenance Curve" demonstrates this and is based on two postulates:

1. A rising exponential curve.
2. The total maintenance expenses over the life of any piece of equipment will equal 100% of the original installed cost.

(Note: The "General Maintenance Curve" is only of general use as an example. First, it relates to crossbar PBX's, while the particular competitive case may involve solid state equipment. Second, the exhibit is based on average data related to a Bell system cost accounting study of a group of representative PBX's during the late 1950's and the 1960's. Nevertheless, the general slope of the cost curve indicates, at the least, that whatever the system maintenance costs grow the longer it is in use, and then costs fairly rapidly become very significant in dollar terms.)

There are several significant facts revealed by charting the maintenance over the total life of a system. Perhaps the most important is that it proves that costs increase with time, e.g.:

Did you ever say to yourself that "It's time to get a new car, my old one is costing a fortune"? It probably does not perform very satisfactorily in later years either, since to refurbish it as it was originally is far too expensive.

And another very important factor that charting maintenance expense points out very vividly is:

* * * * *

Exhibit 65A

Same as tab F to exhibit 66.

Exhibit 66

MICHIGAN BELL,
Detroit, Mich., June 8, 1973.

B. SIEGEL,
Detroit, Mich.

DEAR MR. YANKEE: I would like to thank you for this opportunity to re-emphasize Michigan Bell's pending proposal to change the main office at B. Siegel to a Series 200 dial system. I have thoroughly discussed the entire proposal with Larry Boledovich, the M.B.T. Consultant who originally presented our recommendation. The conditions, benefits, and recommendation to change to a dial system remain the same. Basically our dial system will free one operator in that many calls will now bypass her. In our original recommendation the 25 odd lines that you presently have were to remain as is. With your manual system these lines are used to make outgoing calls without being delayed by the operator. These numbers are also given out to others to use as a direct inward contact. I checked the usage on all of these lines and they totaled 2,000 outgoing calls per month in the month of April. There is no accurate way to determine how many incoming calls are received on these lines.

I feel that the 3 lines that are currently on the Credit Inquiry phones should definitely remain intact. Since that number is listed separately in the telephone book, your customers can call directly into the department without having to be held up by the operator. The incoming call volume on these 3 lines is substantial and by keeping the lines it will lessen the incoming call load on the operator. If we did remove these lines and replace them with 3 stations the cost difference is a mere \$.45 per month saving. I feel it is worth the additional \$.45 per month to remove the incoming call volume from the operator's duties. Taking these things into consideration I recommend that we keep the Credit Inquiry department the same with 5 6-button telephones that each answer the three odd lines 961-5125, 6, and 7 and two dial stations.

Now, let's discuss the rest of the odd lines which appear on the executive phones, the buyers phones, and various other administrative phones. These lines are also used to place outgoing calls and receive incoming calls without having to go through the operator as you would otherwise do with your manual system. With the new dial system we could eliminate these 22 odd lines and leave each of these people with a single station telephone. They would be able to dial their own calls by dialing the number 9 and then the number they desired. All incoming calls for them would now have to go through the operator which would mean an additional work load on her. By analyzing the traffic study we previously conducted. I don't feel that this extra load would be more than one operator could handle. During your busy season we can run usage studies and if needed we could add odd lines. Since we know that the outgoing call load will increase approximately 2,000 calls per month I do recommend that we increase the number of dial 9 trunks. Originally we felt that 6 would be sufficient but if we disconnect these 22 odd lines I feel you would require a minimum of 8 dial 9 trunks. After the system has been installed a periodic study will allow us to make appropriate recommendations on these dialable lines. I also feel that since there will be additional calls coming into B. Siegel through the operator, which bypassed her before, we should increase the number of incoming trunks from 10 to 12. The additional charge for these 4 trunks would be \$29.60 per month.

In our original recommendation we had suggested that Ms. Labon have a phone that answered the executive stations so she could take messages for

them and take this function away from the operator. Since we will now be adding responsibility to the operator I feel that it is important that we do make this change. We will install a 10-button set for Ms. Labon. I also feel that Mr. Walker and Mr. Baum should each retain their 2 stations on 6-button telephones.

In the Credit Authorization department we recommend 5 10-button sets to each answer 7 stations which I still feel is necessary.

To summarize our recommendation for key telephones, I feel that we should have 5 6-button phones in the Credit Inquiry department, 5 10-button sets in Credit Authorization, 2 6-button phones for Mr. Walker and Mr. Baum, and 1 10-button set for Ms. Labon. We will disconnect 22 of the 25 odd lines and make those phones single station sets. The other 3 lines will remain in the Credit Inquiry department. Our original proposal had these charges quoted as \$366.60 per month. With these revisions we would reduce this figure to \$121.45. We are also going to add 4 trunks to the original proposal for an additional \$29.60 per month. The total saving per month would be \$215.55 over our original figure.

I would now like to turn my attention to the pending proposal you have received from TPI. There are several areas I would like to cover including features, hidden costs, cost versus price, and a cost comparison.

Let's look at the features first. (1) You indicated that you were impressed with their switching system because it is electronic. It is true that their switching equipment is electronic and so is ours. All equipment that works with electricity is electronic. Their equipment uses a crossreed switch which is slightly different than the crossbar switch that ours uses. Neither is solid state and both are similar. Their equipment is no faster in call completion than ours, which was one of your main concerns. Another area of concern was space. The equipment that we have recommended is cabinetized. Each cabinet is 6 feet 10 inches high, 4 feet 7 inches wide and 2 feet 2 inches deep. Your system would require 2 of these cabinets. TPI gear is also cabinetized and does take up less space than ours but neither takes up any considerable amount of space as you can see by our dimensions. Their switching equipment is definitely good equipment but with MBT you really don't have to concern yourself with switching gear. We maintain it and are constantly updating it at no extra cost to you. Being a telephone user, as long as you receive a dial tone and can use your phone you shouldn't need to worry about what type of switches are completing your call.

Another feature that you seemed interested in was restriction of long distance calls which is built into their equipment. (2) It is optional with our system at an extra charge. We didn't recommend this feature because our feeling is that there isn't a sufficient need for it. The stations at the Woodward store are primarily the ones you would want to restrict from placing calls. We will wire them so that they will have to place all outside calls through the operator, which they are currently doing. They will be able to dial any other station user with the new system.

Call transfer and consultation hold are two other features of the TPI equipment. We also could have recommended these additional features at a higher cost to you but here again we didn't uncover the need for them. During the 2 day traffic review we conducted, only 18 calls per day were transferred by the operator, which is a very low figure. These calls are mostly transferred from one department to another within the store. At the main office most incoming callers know exactly who they need to talk with and therefore don't need to be transferred. Now with this call transfer feature you have to train each of your personnel to, in essence, be an operator. Each person will have to have a directory of all the station users and use their time to look up the number, explain to the caller that you will be glad to transfer their call, and then follow the procedure of dialing the desired station number. Since this feature is to be used mainly on the floor of the store you are using your sales people's time to be an operator instead of watching the floor and serving your customers. Another consideration is that with every new person hired by you someone will have to train that person on how these features work. These are the reasons we didn't recommend call transfer.

Consultation hold is another feature that is available but that we didn't recommend. Very few of the people in the main office have the need to seek someone else's opinion to complete their call. On any decision making problem a meeting would be necessary, not just a simple call. The store users normally know their own area and don't need to consult with others while on a call.

Both call transfer and consultation hold are very useful services in the appropriate setting, but at B. Siegels we don't feel there is a need for either of them and we don't feel you should have to pay for them if you don't need them.

There are certain features on the TPI proposal that we don't offer at all at this time. One of these dial pick-up service. Here again, even if we had this feature I wouldn't recommend it. When a person is away from his phone it is the operator's duty to explain this condition to the caller and take a message. With this feature you are expecting other station users to interrupt what they are doing to answer someone else's call. Then they have to spend their time to take a message and see that this message is delivered. The operator is trained and paid to do all of these things.

The call back feature is another one that we don't offer. Before I would recommend it I would have to determine the number of times during a day that people having this service actually place an internal call and receive a busy signal. If it only happens occasionally to a few people I couldn't justify recommending it. Again, it does sound like a functional service if there is an application for it.

The one service that comes standard with our equipment but which is not included in the TPI recommendation is the busy field. This is a very important feature as far as speed and adequate handling of incoming calls are concerned. The operator would at a glance be able to tell a caller if the station he desired is free. With the TPI equipment the operator would have to dial the station before she would know the station is busy. With MBT, if the station were busy the operator could automatically camp on the call. I definitely feel that this service is a time saver for the operator.

Tie lines are another feature we discussed. TPI is including the rate for tie stations to be extended to the five stores. If we could charge you for only a station we would; but we can't. We are recommending dial tie lines which are the most economical we have to offer with this system. Special equipment has to be installed and maintained for these tie lines and that is why we charge for them. If you don't need tie lines with the system, you don't have to pay for the special equipment. This equipment is built into TPI gear which indicates that even if you don't need it it's there and you are in essence paying for it.

In summarizing this feature comparison. I feel that we have made the best possible recommendation for a telephone system at B. Siegels. We have taken into consideration many aspects of your business and fitted our features to your needs.

I mentioned earlier the term "hidden costs" involved in leasing a telephone system for any other vendor. Let's discuss them one at a time.¹

First of all you are now responsible for paying personal property tax, both city and county. I have a chart attached which explains how this tax is computed.² In Detroit the current rate is \$7.76 per \$100.00. The first year your tax would amount to \$1,966.00 which on a monthly basis is \$163.80. This tax does decrease over the years but then again the tax rate normally goes up.

Secondly, you would have to insure this new property. The content insurance rate in your area is \$1.27 per \$100.00 per month which would put your cost at \$684.00 per year or \$57.00 per month. When leasing equipment the normal contract reads that the leasee is responsible for the insurance. This is one point that you should be sure to have your lawyer determine.

A third hidden cost and one that is very important is maintenance. You are considering a maintenance contract which is quoted in the TPI proposal as \$86.00 per month. There are many questions that you should get answered regarding this contract. What does complete maintenance mean? Are parts

¹ See Tab D.

² See Tab E.

and labor included? Where are your repairmen located? Is there a clause similar to "We guarantee service barring acts of God"—which could include a snowstorm, a fogged-in airport or a traffic jam? Is the contract subject to any increase over the years? Normally contracts have a set percentage which they may increase each year. I noticed that in the TPI proposal the maintenance figure of \$86.00 per month for the total period of 20 years was used. My experience indicates that this is highly unusual. Actually, how can a maintenance firm guarantee their price will remain the same for any period of time? Do they know how much a repair truck will cost them in 10 years, how much necessary tools will cost them in 10 years, or, most important, how much labor will cost them in 10 years? Everyone's costs are going up and theirs will too so I don't see how they could guarantee you an \$86.00 per month contract. This is definitely another point you should have your attorney cover.

The industry overall does agree with the General Maintenance Curve.^a Basically this curve shows that during the first few years maintenance costs are approximately 1% of the cost of the system. As the equipment becomes older the maintenance costs increase at a more rapid rate. With MBT equipment maintenance is included in our price.

In addition to the hidden costs of personal property tax, insurance, and maintenance you should also consider your cost of administration. Someone within your company will have the responsibilities of figuring and paying the tax, buying and paying the insurance, figuring depreciation on your income tax, and also overseeing the maintenance contract. All of these functions will take time and time is money. You won't have this administration problem with MBT.

One last consideration that could be termed a hidden cost is the expense of moves and changes. B. Siegel does make quite a few minor changes of phones during the year, especially during the busy season when additions are also made. MBT rates for minor moves, changes and additions are established charges. You would have to ask your TPI vendor just what the charges would be.

As you can see the "cost" of TPI's telephone system includes much more than just the lease payment. Besides the hidden costs we just discussed, there are many services that MBT includes in our price. Equipment is just a small part of a total communications system. Like an iceberg, equipment is the visible part of the system. But below the surface are many services which we include. Let me explain each of these to you.

1. Our engineering department will co-ordinate the installation of your new dial system. Through periodic performance evaluations they assist in maintaining proper service for your needs.

2. Our traffic department works for you in various ways. We have run traffic usage studies which keep us updated as to the work load on your console. We then can make recommendations for improvement. Your Traffic Service Advisor will make periodic visits to assure continued good service. We will also train your personnel on a continuing basis, not just initially. We offer special training on telephone good usage as well as training in proper use of the equipment.

3. Your communication consultant is actually on your payroll. His job is to insure that your communications needs are fulfilled year after year. Because of his knowledge of your operations he can help you solve business problems through the better use of communications. During 1972 your consultants devoted 150 business days serving B. Siegels.

4. Our data specialists work with data transmission and related services. He is at your disposal to conduct indepth organization and operation studies with regard to interrelated computer and data transmission applications.

5. Our business office representatives are at your immediate disposal during normal business hours. They can co-ordinate telephone moves, changes, or removals at established charges. They also maintain current equipment and billing records.

6. Our installation force is ready to meet the needs of the constantly changing communications requirements in this area. We have over 1,300 trained installers located in the Detroit Metropolitan area.

^a See Tab F.

7. Our maintenance force is also ready to serve you. Need for maintenance is inevitable and increases with equipment life. Michigan Bell has 961 trained repairmen in the area. Repair service centers are open 24 hours, 7 days per week. Normal repair jobs are usually handled the day of the report. In critical situations repairmen can often be on your premises in minutes.

We feel that our team is a good one and we just wanted B. Siegels to be aware of all the vital services provided by Michigan Bell. These services are provided at no extra cost to you. With Michigan Bell our cost is really our price—It includes the cost of equipment, the hidden costs we discussed earlier, and the services of the Bell Team we just described. On the other hand with TPI their cost to you is only part of the total price. On top of the lease amount of the hardware you would have to add the hidden costs which include taxes, maintenance, insurance, and administration. To this total you have to add the additional cost of obtaining the Bell Team services from an outside source.

Let us now compare the *price* of our system in specific dollar amounts with that of the *price* of TPI's system. Please turn to the attached chart.—Tab J as you can see from the chart when you add all the various costs of TPI's system together, the bottom line figure comes out in favor of MBT by \$301.55 per month. Let me emphasize that TPI's figure does not include the Bell Team services which are very important to B. Siegel.

Taking into consideration our revised proposal the effect of our pending rate request has changed. If it is approved the rate of \$1,870.40 would increase to \$1,934.20 which is an increase of \$63.80. This increase is approximately 2.5% of your total billing. Our rate request does require approval by the Michigan Public Service Commission. They may be approved as proposed, they may be changed to be higher or lower or they may even remain at today's rates.

In conclusion, I definitely feel that B. Siegel should stay with the dependable Bell Team and agree to change your present manual board to our dial communications system. Again, thank you for this opportunity to present our recommendation.

TAB C

FEATURES - NEEDED OR NOT ?

	MBT	TP!
CONSOLE WITH BUSY FIELD	R	
CALL BACK		?
CALL TRANSFER		N
CONSULTATION HOLD		N
DIAL PICK UP		N
LONG DISTANCE RESTRICTION		N

R - Recommended & needed

N - Recommended but NOT needed

— why ?

TAB D

HIDDEN COSTS

	MBT	TPI
PROPERTY TAX	NO	\$ 163.80
INSURANCE	NO	57.00
MAINTENANCE	NO	86.00
ADMINISTRATION	NO	?

TABLE**PERSONAL PROPERTY TAX**

THE STATE OF MICHIGAN HAS ESTABLISHED A DEPRECIATION SCHEDULE TO BE USED AS A BASIS FOR LEVYING "PERSONAL PROPERTY TAXES." THE SCHEDULE IS AS FOLLOWS:

ITEM PURCHASED IN 1970	94% OF PURCHASE PRICE
1ST YEAR	83% OF PURCHASE PRICE
2ND YEAR	74% OF PURCHASE PRICE
3RD YEAR	68% OF PURCHASE PRICE
4TH YEAR	63% OF PURCHASE PRICE
5TH YEAR	59% OF PURCHASE PRICE
6TH YEAR	56% OF PURCHASE PRICE
THEREAFTER, 2% PER YEAR TO 40%, WHERE IT STAYS	

THIS ESTABLISHES THE VALUE OF THE ITEM: THE ASSESSMENT RATIO IS 50%.

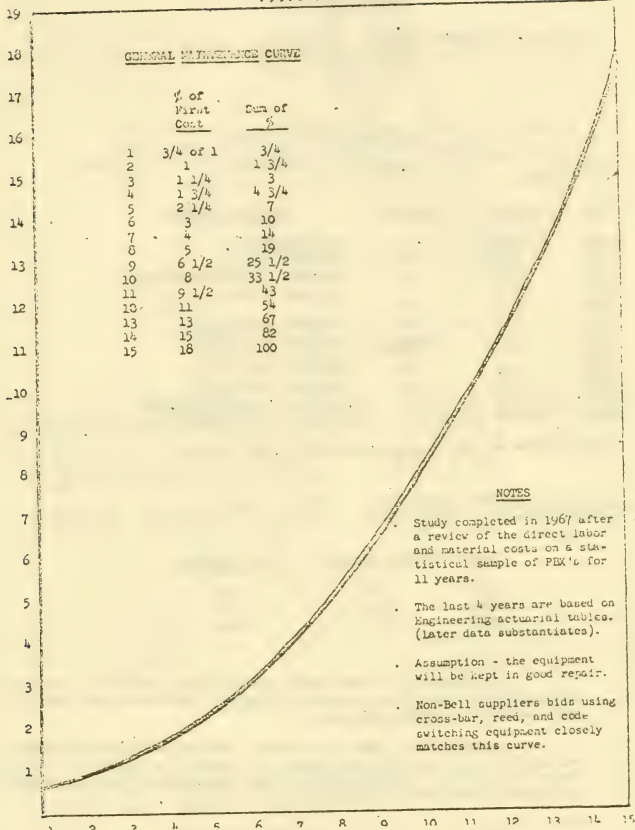
IN 1971, THE RATE WAS \$50.606 FOR EACH THOUSAND DOLLARS OF ASSESSMENT.

IN ADDITION, THERE IS A COUNTY TAX OF \$7.10 PER THOUSAND DOLLARS, BASED ON THE SAME ASSESSMENT.

AS AN EXAMPLE, LET'S TAKE THE CASE OF A PURCHASE OF ONE AKD-741 PABX, WITH ALL STATION EQUIPMENT, WHICH WAS PURCHASED IN 1970 AT A PRICE OF \$16,810.00.

	<u>PURCHASE PRICE</u>	<u>TAX BASE</u>	<u>ESTABLISHED VALUE</u>	<u>PERSONAL PROPERTY TAX</u>	<u>COUNTY TAX</u>
1970	\$16,810	94%	\$15,801	\$442.91	\$56.29
1ST YEAR		83%	13,952	353.02	54.29
2ND YEAR		74%	12,439	314.71	44.15

TAB F



TABLE

MBT RATE CASE CHRONOLOGY

TOTAL

YEAR	INCREASE	DECREASE	SERVICES EFFECTED
*1955	2.8M	----	Lines/Key/PEX
1957	2.8M	----	Exchange Lines
1958	2.2M	----	Exchange Lines/Message Units
1960	4.0M	----	Exchange Lines
1962	----	1.6M	Toll
1964	----	7.4M	Exchange Lines/Toll
1965	----	10.6M	Exchange Lines/Toll
1966	----	3.5M	Exchange Lines/Toll
1968	----	.8M	Exchange Lines/Toll
1970	14.8M	----	Exchange Lines/Toll
*1971	18.0M	----	Business Lines/Key/PEX/etc.
*1973	29.7M	----	Business Lines/Key/PEX/etc.

(NOTE: There was no rate case activity in 1953 or 1954).

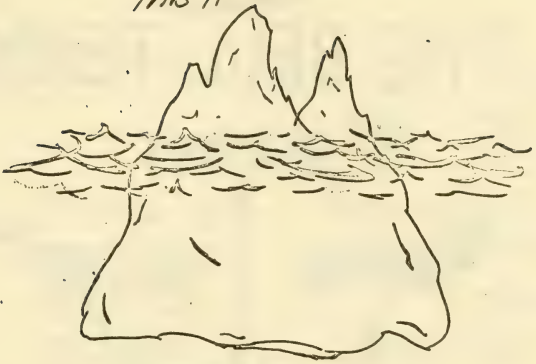
* EQUIPMENT ONLY

YEAR	TOTAL INCREASE	% OF INCREASE
1955	2.8M	1.6M
1971	18.0M	3.0M
1973	29.7M	4.5M

If we get all we have asked for this year, the total percentage of increase in these three cases will be 9.1%. Distribute that over 20 years and you get .455% per year.

There is still more to consider. Not all of this 9.1% increase was applied to Key and PEX equipment. For example, in the present filing for a 4.5% increase in total billing, only 6.3 million of the 29.7 million will apply to Key and PEX rates.

TAB H



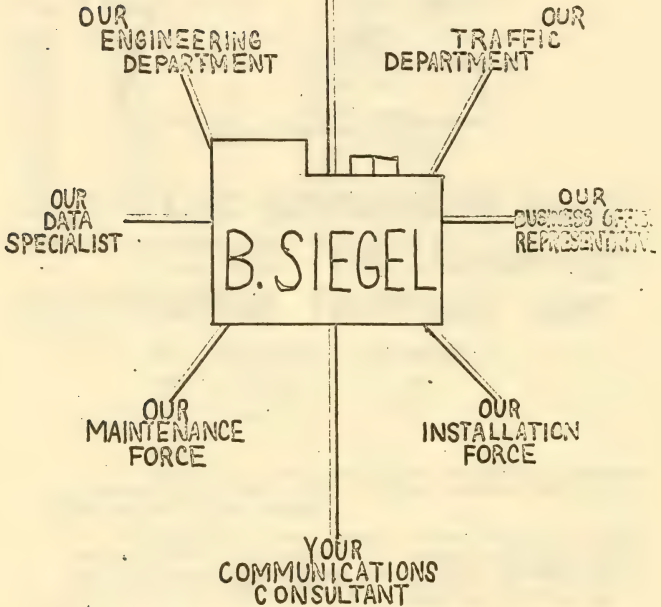
THERE IS MUCH MORE TO A
COMMUNICATIONS SYSTEM
THAN EQUIPMENT ALONE

LET'S SEE WHAT IS
BENEATH THE SURFACE

TAB I

THE BELL TEAM

SERVING



TAB J
COST ANALYSIS

	MBT	TP1
TRUNKS (20)	\$148.00	\$115.00
EQUIPMENT	669.25	877.90
INTERFACE		175.00
TIE LINES	802.05	467.25
MILEAGE - STORE	218.40	218.40
PROPERTY TAX		163.80
INSURANCE		57.00
MAINTENANCE		86.00
ADMINISTRATION		?
USE TAX	<u>32.70</u>	<u>11.60</u>
	1870.40	2171.95

SAVINGS PER MONTH WITH MBT - \$301.55

Exhibit 67

[Excerpt from Bell publication]

PLAIN TALK ABOUT COMMUNICATIONS PROPOSALS AND HOW TO COMPARE THEM

The lessor (vendor) may assign his rights to a third party and the lessee waives all right of legal recourse against the assignee, has recourse only with the vendor, and must continue lease payments should the lessor fail financially. Loss and damage are not covered but lease payments must be continued if caused by theft, negligence, breach of contract, or if the lessee fails to provide prompt notice of loss.

CONSIDERATIONS

The items listed and discussed in the following paragraphs are cited as examples of areas which a knowledgeable communications user would explore before choosing a supplier.

SUPPORT CAPABILITIES

Included in the basic monthly telephone charge are a number of competent services: Conduit layout and pole-line planning for connecting station locations, apparatus and the attendant position. Attendant and station-user training, provided as needed by the telephone company.

Interviews with users and planning system and individual telephone arrangements throughout the life of the service.

Some or all of these may be part of the prospective vendor's package. The critical questions are, does the vendor offer the service, under what circumstances and at what cost?

MAINTENANCE CAPABILITIES

Maintenance over the anticipated life of the system is a major concern for any prospective user of communications services. Who will maintain the service, the user, the vendor or a third party?

What arrangements exist for handling repair calls? Where are the maintenance people located? What type of service is offered for system trouble, non-system or station telephone problems?

Hours count when service is interrupted. What happens after hours and on weekends? Floods, wind, hurricanes, earthquakes and similar phenomena play havoc with communications. Even a minor fire or a faulty sprinkler head can put a system out of service.

Although some vendors' contracts refer to a "two-year" supply, the parts likely to be needed to repair and maintain a system cannot be accurately estimated for a single installation. However, a supplier with a number of locations to serve can rely on the law of averages to some extent. Backup stocks are needed and the distance to the factory or a warehouse should be considered when out-of-service time is critical.

Telephone companies routinely draw on one another for parts and people in emergency situations.

Test equipment and training should also be considered. Modern switching equipment is sophisticated and complex. Technicians must be well-trained and well-equipped to handle problems competently. Training house electricians to service communications gear is at best a calculated risk.

Much publicized but generally isolated telephone company service problems may obscure the consistently good service which exists throughout most of the telephone industry, and the service is consistently improving. Even where telephone service problems exist, any prospective purchaser should explore the other supplier's maintenance performance capabilities. Over the projected life of the equipment, is it likely that the interconnect company will be able to provide the same quality of service as the telephone company?

FINANCIAL STABILITY

A contract is only as good as the supplier's ability to perform. It is only good business to inquire into the financial stability of a prospective vendor

and establish with reasonable certainty that the company will be in business for the duration of the contract.

SCOPE OF OPERATIONS

When considering a contract for installations in separate locations it is important that the vendor or maintenance firm be represented at or near each of the prospective locations. The alternative is to evaluate a number of local companies and deal with each separately.

FLEXIBILITY

How important is the ability to reduce operating expenses from time to time? Disconnecting equipment used seasonally is in certain industries a common occurrence. Where service is owned or subject to a long-term lease, such adjustments may not be practicable.

Plant closing, moves and the like are often required to balance production and control expenses. Owned-versus-leased property, facilities, equipment and communications gear may unfavorably affect the economics of the case.

In many industries, businesses are sold "lock, stock and barrel." Would an eight-to-ten-year-old switchboard be a help or hindrance in transferring your property? The answer depends, not only on the condition of the equipment, but also on the attitude of the would-be buyer toward investing his money in communications equipment as opposed to his principal interest.

Impending technological change is important today, and as new communications services are offered the effect of ownership on a change-out should be given some thought. Will the purchased or leased equipment be compatible with new offerings? Can the service be economically changed to meet the needs of the business?

* * * * *

Exhibit 68

OCTOBER 16, 1973.

Mr. JIM KORTE,
TPI, Inc.,
Grand Rapids, Mich.

DEAR JIM: We finally had our meeting with Jack Brackett and have decided to stay with Michigan Bell at least for the time being.

Since you spent a lot of time with us, which we appreciate, I feel that you are entitled to know the reasons why we made this decision. First of all, the interface charges which you said would be applicable were considerably lower than what Michigan Bell has indicated to us. Secondly, within a very short time we will be on the "measured usage" system which is going to provide a great deal more income to Michigan Bell—hence, they anticipate passing on some of these savings by reducing their equipment rates to their customers. Thirdly, and particularly in view of the measured usage approach, there is always a possibility that some of the independent companies may feel the competition very strongly and perhaps go under. According to the information we have, this has happened in a couple of other states already.

We will be happy to reconsider our position from time to time and of course whatever action we take will depend on the situation at the time.

Again, thanks for your time and patience.

Cordially,

Exhibit 69

MICHIGAN BELL,
MARKETING DEPARTMENT,
Holland, Mich., July 5, 1973.

EDWARD MARSILJE,
Marsilje Associates Inc.,
Holland, Mich.

DEAR MR. MARSILJE: We would like to thank you for the opportunity to present our evaluation of your telephone service.

On the following pages are some things we feel are often overlooked when making a consideration to purchase private telephone equipment.

We have made a computerized Cash Flow Analysis using standard accounting methods. We have used figures we feel are realistic, however, if you disagree with any of the cost factors we would be happy to use your figures for another analysis. Also attached is a list of advantages of all Service that are sometimes overlooked and is difficult to put a dollar figure on, even though it does have value.

Again, I want to express our appreciation for the opportunity to present the Michigan Bell side of the story. We would be happy to take up with you, at your convenience, any questions you may have and to provide any additional information required, please contact me at 538-8150.

Sincerely,

ROGER A. FRY,
Communications Consultant.

Attachments.

BOTH SIDES

With intense competition in the communication industry today, often statements made tell only half the story. We at Michigan Bell feel you are entitled to both sides of the story to aid in your considerations.

Vendors of telephone equipment claim:

(1) *By purchasing own telephone equipment you will reduce operating expense:* this is true, but you will incur a capital expense in its place.

(2) *Growth can be afforded at minimum expense:* What will it cost you to expand the capacity of your system?

What is the charge for additional equipment (instruments, cable, etc.)?

Does the system have the capacity for one more location? 5 more locations?

Does your investment decrease if you reduce your service?

(3) *There is no termination liability to move, delete or add equipment:* There is no contract involved with your present Michigan Bell service therefore no termination liability exists in any event. Will the private supplier buy back equipment you no longer need?

(4) *Protect against future rate increases:* This is true only for the equipment portion of your bill. You would still be liable for any increase in line charges or any increase affecting usage, e.g., long distance, mileage charges, WATS, etc. In Michigan Bell's past 20 year history of rate increases, the total increase related to equipment is 4.6%, or .23% per year average. We are presently requesting a 4.5% increase in rates. If approved, only .94% of this would apply to equipment. The prices charged by *any* supplier *must* change as economic conditions dictate. Michigan Bell has a history of reducing rates for some services whenever it is possible.

(5) *Increases net worth of your business:* This is also true, however, being an asset and capital equipment, it is liable for property tax, if applicable, and must be insured. Like any asset once depreciated its value is nil.

(6) *Our total communications concept allows you to deal with one company for all your communications needs:* The "Bell System" is the only communications system in the area that provides WATS Service, Foreign Exchange Service, Line Usage Studies, etc., with a variety of hardware designed to your needs.

There is much more than hardware when you talk about a total communications concept.

(7) *System design not restrained by Tariff restrictions, allowing greater flexibility in system design and features:*

Actually, rather than being restrictive, Tariff regulations are for the customer's benefit. All regulations governing Michigan Bell operations are approved by the Michigan Public Service Commission, a branch of the State Government having the responsibility to guarantee a high quality of telephone service to Michigan Telephone users at a fair cost.

Previously encountered become involved. The following illustration shows some of the costs shifted to the consumer and how the overall economic picture looks in relation to a similar telephone company recommendation over the duration of the analysis.

The information below will be used when making the comparison for MARASC:

Bell:

Monthly rate (nontaxable)-----	\$417. 90
Monthly rate (taxable)-----	\$0
Installation charge-----	\$0
Miscellaneous charge (year(s))-----	\$0
Miscellaneous charges-----	\$0
Rate increase projection (average percentage per year)-----	0. 455

Non-bell:

Type contract-----	(1)
Equipment value-----	\$12, 901. 00
Deposit, installation, etc-----	\$1, 434. 00
Analysis period (years)-----	7
Initial period (years)-----	7
Monthly rate-----	\$0
Subsequent period (years)-----	0
Monthly rate-----	\$0
Connecting arrangements:	
Installation charge-----	\$180. 00
Monthly rate-----	\$58. 50
Salvage value (\$0 printed if less than 10 percent of equipment value)-----	\$0
Buy-out option cost-----	\$0
Miscellaneous charge (year(s))-----	\$0
Miscellaneous charges-----	\$0

Customer:

Objective rate of return (percent)-----	10
Minimum rate of return (percent)-----	9
Cost of capital (percent)-----	8
Depreciation method-----	(2)
Years depreciated-----	7
Income tax bracket (percent)-----	50

Maintenance:

Charges during initial period (monthly)-----	\$18. 00
Charges after initial period (monthly)-----	\$18. 00

Taxes:

Sales tax rate (percent)-----	
Property tax rate (per \$100)-----	\$5. 21
Property tax increase projection (percent per year)-----	0. 50
Utility tax-----	\$0
Investment tax credit passed to customer at (percent)-----	4

¹ Outright purchase.

² Straight line.

To include the effect of income taxes in this analysis, operating expenses and depreciation allowances are shown here as net amounts determined by Marase's effective income tax rate.

Year	Payments	Sales and other taxes	Installation or down payment	Connecting arrangement and installment	Maintenance
0-----	\$0	\$258.02	\$717	\$90	\$0
1-----	0	0	0	351	108.00
2-----	0	0	0	351	110.70
3-----	0	0	0	351	113.47
4-----	0	0	0	351	116.30
5-----	0	0	0	351	119.21
6-----	0	0	0	351	122.19
7-----	0	0	0	351	125.25

Year	Insurance	Property taxes	Miscellaneous expense including purchases and capital expense	Total non-bell cash flow
0-----	\$0	\$0	\$13,481.60	\$14,546.62
1-----	25.80	156.15	0	640.96
2-----	25.80	133.31	0	620.81
3-----	25.80	113.63	0	603.89
4-----	25.80	102.26	0	595.37
5-----	25.80	92.50	0	588.51
6-----	25.80	84.35	0	583.35
7-----	25.80	79.58	0	581.63

Year	Cash flow total	Interest deduction	Less depreciation	Tax credit	Adjusted non-bell total
0-----	\$14,546.62	\$0	\$0	\$516.04	\$14,030.58
1-----	640.96	0	921.50	0	-280.54
2-----	620.81	0	921.50	0	-300.69
3-----	603.89	0	921.50	0	-317.61
4-----	595.37	0	921.50	0	-326.13
5-----	588.51	0	921.50	0	-332.99
6-----	583.35	0	921.50	0	-338.15
7-----	581.63	0	921.50	0	-339.87

Year	Bell charges	Bell miscellaneous	Bell total	Adjusted non-bell total	Annual difference
0-----	\$0	\$0	\$0	\$14,030.58	\$-14,030.58
1-----	2,507.40	0	2,507.40	-280.54	2,787.94
2-----	2,518.81	0	2,518.81	-300.69	2,819.50
3-----	2,530.27	0	2,530.27	-317.61	2,847.87
4-----	2,541.78	0	2,541.78	-326.13	2,867.91
5-----	2,553.35	0	2,553.35	-332.99	2,886.34
6-----	2,564.96	0	2,564.96	-338.15	2,903.12
7-----	2,576.64	0	2,576.64	-339.87	2,916.50

Summary of reinvested savings at 10.000%.

The annual difference between the two proposals may be considered a savings for that year. Reinvesting this savings at 10.000% produces the following:

Year	Adjusted non-bell total	Bell total	Annual savings	Future worth
0	\$14,030.58	\$0	¹ \$14,030.58	¹ \$27,341.63
1	¹ 280.54	2,507.40	2,787.94	4,939.01
2	¹ 300.69	2,518.81	2,819.50	4,540.83
3	¹ 317.61	2,530.27	2,847.87	4,619.57
4	¹ 326.13	2,541.78	2,867.91	3,817.19
5 ²	¹ 332.99	2,553.35	2,886.34	3,492.47
6	¹ 338.15	2,564.96	2,903.12	3,193.43
7	¹ 339.87	2,576.64	2,916.50	2,916.50
Total			¹ 5,998.61	¹ 272.62

¹ Indicates a Bell system advantage.

² Indicates a cross-over in savings.

Accepting the telephone company proposal results in a savings of \$272.62.

Summary of annual cash flows discounted at 10.000%.

At Marasc's rate of return, money could be invested today to cover the anticipated cash flows generated by these two proposals during the equipment service life.

Year	Bell		Non-bell	
	Cash flow	Present value	Cash flow	Present value
0	\$0	\$0	\$14,030.58	\$14,030.58
1	2,507.40	2,279.45	-280.54	-255.04
2	2,518.81	2,081.66	-300.69	-248.50
3	2,530.27	1,901.03	-317.61	-238.62
4	2,541.78	1,736.07	-326.13	-222.75
5	2,553.35	1,585.43	-332.99	-206.76
6	2,564.96	1,447.86	-338.15	-190.88
7	2,576.64	1,322.22	-339.87	-174.41
Total	17,793.21	12,353.72	11,794.60	12,493.62

The net present savings if the telephone company proposal is accepted is \$139.90.

As you may be aware, Michigan Bell Telephone, at this time, is before the Michigan Public Service Commission with a proposal for a change in rate structure. The proposed rates require approval by the Michigan Public Service Commission. Our rates may be approved as proposed, they may be changed to be higher or lower, or they may even remain at today's levels. However, in order to present you with all the facts, we submit here your costs for the identical service you have under our proposed rate structure.

Previously encountered become involved. The following illustration shows some of the costs shifted to the consumer and how the overall economic picture looks in relation to a similar telephone company recommendation over the duration of the analysis.

The information below will be used when making the comparison for MARASC:

Bell:	
Monthly rate (nontaxable).....	\$293. 15
Monthly rate (taxable).....	\$0
Installation charge.....	\$0
Miscellaneous charge (Year(s)).....	\$0
Miscellaneous charges.....	\$0
Rate increase projection (average percentage per year).....	0. 455
Non-Bell:	
Type contract.....	(1)
Equipment value.....	\$12, 901. 00
Deposit, installation, etc.....	\$1, 434. 00
Analysis period (years).....	10
Initial period (years).....	10
Monthly rate.....	\$0
Subsequent period (years).....	0
Monthly rate.....	\$0
Connecting arrangements:	
Installation charge.....	\$180. 00
Monthly rate.....	\$58. 50
Salvage value (\$0 printed if less than 10 percent of equipment value).....	\$0
Buy-out option cost.....	\$0
Miscellaneous charge (year(s)).....	\$0
Miscellaneous charges.....	\$0
Customer:	
Objective rate of return (percent).....	10
Minimum rate of return (percent).....	9
Cost of capital (percent).....	8
Depreciation method.....	(2)
Years depreciated.....	10
Income tax bracket (percent).....	50
Maintenance:	
Charges during initial period (monthly).....	\$18. 00
Charges after initial period (monthly).....	\$18. 00
Taxes:	
Sales tax rate (percent).....	4. 00
Property tax rate (per \$100).....	\$5. 21
Property tax increase projection (percent per year).....	0. 50
Utility tax.....	\$0
Investment tax credit passed to customer at (at percent).....	4

¹ Outright purchase.

² Straight line.

To include the effect of income taxes in this analysis, operating expenses and depreciation allowances are shown here as net amounts determined by marasc's effective income tax rate.

Year	Payments	Sales and other taxes	Installation or payment	Connecting arrangement and installment	Maintenance
0.....	0	\$258.02	\$717	\$90	\$0
1.....	0	0	0	351	108.00
2.....	0	0	0	351	110.70
3.....	0	0	0	351	113.47
4.....	0	0	0	351	116.30
5.....	0	0	0	551	119.21
6.....	0	0	0	351	122.19
7.....	0	0	0	351	125.25
8.....	0	0	0	351	128.38
9.....	0	0	0	351	131.59
10.....	0	0	0	351	134.88

Year	Insurance	Property taxes	Miscellaneous expense including purchases and capital expense	Total non bell cash flow
0.....	0	0	\$13,481.60	\$14,546.62
1.....	25.80	156.15	0	640.96
2.....	25.80	133.31	0	620.81
3.....	25.80	113.63	0	603.89
4.....	25.80	102.26	0	595.37
5.....	25.80	92.50	0	588.51
6.....	25.80	84.35	0	583.35
7.....	25.80	79.58	0	581.63
8.....	25.80	76.50	0	581.68
9.....	25.80	73.39	0	581.78
10.....	25.80	70.25	0	581.93

Year	Cash flow total	Interest deduction	Less depreciation	Tax credit	Adjusted non-bell total
0.....	\$14,546.62	\$0	\$0	\$516.04	\$14,030.58
1.....	640.96	0	645.05	0	-4.09
2.....	620.81	0	645.05	0	-24.24
3.....	603.89	0	645.05	0	-41.16
4.....	595.37	0	645.05	0	-49.68
5.....	588.51	0	645.05	0	-56.54
6.....	583.35	0	645.05	0	-61.70
7.....	581.63	0	645.05	0	-63.42
8.....	581.68	0	645.05	0	-63.37
9.....	581.78	0	645.05	0	-63.27
10.....	581.93	0	645.05	0	-63.12

Year	Bell charges	Bell miscellaneous	Bell total	Adjusted non-bell total	Annual difference
0.....	\$0	\$0	\$0	\$14,030.58	\$-14,030.58
1.....	1,758.90	0	1,758.90	-4.09	1,762.99
2.....	1,766.90	0	1,766.90	-24.24	1,791.14
3.....	1,774.94	0	1,774.94	-41.16	1,816.10
4.....	1,783.02	0	1,783.02	-49.68	1,832.70
5.....	1,791.13	0	1,791.13	-56.54	1,847.67
6.....	1,799.28	0	1,799.28	-61.70	1,860.98
7.....	1,807.47	0	1,807.47	-63.42	1,870.89
8.....	1,815.69	0	1,815.69	-63.37	1,879.06
9.....	1,823.95	0	1,823.95	-63.27	1,887.22
10.....	1,832.25	0	1,832.25	-63.12	1,895.38

Summary of reinvested savings at 10.000%.

The annual difference between the two proposals may be considered a savings for that year. Reinvesting this savings at 10.000% produces the following:

Year	Adjusted non-Bell total	Bell total	Annual savings	Future worth
0.....	\$14,030.58	\$0	¹ \$14,030.58	¹ \$36,391.71
1.....	¹ 4.09	1,758.90	1,762.99	4,157.05
2.....	¹ 24.24	1,766.90	1,791.14	3,839.47
3.....	¹ 41.16	1,774.94	1,816.10	3,539.06
4.....	¹ 49.68	1,783.02	1,832.70	3,246.74
5.....	¹ 56.54	1,791.13	1,847.67	2,975.69
6.....	¹ 61.70	1,799.28	1,860.98	2,724.67
7.....	¹ 63.42	1,807.47	1,870.89	2,490.15
8.....	¹ 63.37	1,815.69	1,879.06	2,273.66
9.....	¹ 63.27	1,823.95	1,887.22	2,075.94
10.....	¹ 63.12	1,832.25	1,895.38	1,895.38
Total.....			¹ 4,413.55	¹ 7,173.90

¹ Indicates a Bell system advantage.

² Indicates a cross-over in savings.

Accepting the telephone company proposal results in a savings of \$7,173.90.

Summary of annual cash flows discounted at 10.000%.

At Marasc's rate of return, money could be invested today to cover the anticipated cash flows generated by these two proposals during the equipment service life.

Year	Bell		Non-bell	
	Cash flow	Present value	Cash flow	Present value
0.....	\$0	\$0	\$14,030.58	\$14,030.58
1.....	1,758.90	1,599.00	-4.09	-3.72
2.....	1,766.90	1,460.25	-24.24	-20.03
3.....	1,774.94	1,333.54	-41.16	-30.92
4.....	1,783.02	1,217.83	-49.68	-33.93
5.....	1,791.13	1,112.15	-56.54	-35.11
6.....	1,799.28	1,015.65	-61.70	-34.83
7.....	1,807.47	927.52	-63.42	-32.54
8.....	1,815.69	847.03	-63.37	-29.56
9.....	1,823.95	773.53	-63.27	-26.83
10.....	1,832.25	706.41	-63.12	-24.34
Total.....	17,953.54	10,992.91	13,539.99	13,758.76

The net present savings if the telephone company proposal is accepted is \$2,765.85.

TELEPHONE COMPANY SERVICE ADVANTAGES

Bell System communications service designed to fit your specific needs offers a number of distinct customer advantages. While some of these advantages can be readily identified in terms of dollar value, other benefits are also apparent. Following are some examples for your consideration:

1. *Bell Team Availability* (a) Maintenance service: The time to think about maintenance service is before you buy. Provided without added cost (no hidden extras), and we maintain the spare parts inventory.

(b) Installation service: Trained technicians are readily available to change or add to your communications system.

(c) Consulting service: Communications Consultants will survey your operations and make recommendations for improved communications as the needs of your business change. This service is provided as an integral part of our complete service offering at no additional charge.

(d) Training for your personnel: All training is provided without charge in the proper use of any services which we provide. Instructional observing on a recurring basis as required.

(e) Engineering and supplier resources: Bell Telephone Laboratories. Western Electric Company.

2. *Pay Only for What is Needed*

Rental is paid only for equipment which is in use.

Station equipment can be removed at any time, thus reducing your costs when the service is not needed. All or any part of your total system can be suspended (placed on half rate) if not needed for temporary or extended periods.

3. *Established Rates and Charges*

As a regulated public utility, our rates are a matter of public record. Installation charges are fixed for any type of work which is to be performed.

4. *Communications is Our Business*

Michigan Bell offers a "service" rather than a "sale". It is our earnest desire to install, maintain, and guarantee a high quality of telephone service for all of our customers. We are committed to these goals.

CONCLUSION

In conclusion, we at Michigan Bell, supported by the continuing advances in technology of: AT&T, Bell Laboratories, Western Electric, feel that we have the equipment, service, experience, and expertise to continue serving your communications needs.

With over: 1,700 employees, 200 installation and repair personnel, 170 installation and repair vehicles, \$1,000,000 in parts inventory, \$250,000 in test equipment, in this area alone, supplemented as needed from other areas, Michigan Bell Telephone Company can provide the: Speed, Quality, Availability, Accountability, Expertise, Resources needed to serve you.

We not only appreciate serving you but regard it as a privilege. We appreciate your past business, and we look forward to providing you with the continuing high standard of service to which you are entitled.

Exhibit 70

LEASING VERSUS OWNERSHIP OF CAPITAL ASSETS

To: Operating Vice Presidents and Comptrollers

From: Vice President—Operations, Vice President—Construction Plans, Vice President—Service Costs, and Vice President and Comptroller

Synopsis: Discusses the question of leasing versus ownership of capital assets, such as buildings, motor vehicles and equipment.

The question of leasing versus ownership of capital assets continues to confront the Bell System, especially during periods of projected high growth requiring large capital expenditures. Basically this question is of a financial nature and decisions to lease should be made only after thorough economic analysis.

Numerous economic studies have been made relating to the feasibility of leasing versus ownership of various capital assets and, as a general rule, ownership has been determined to be economically advantageous. Leasing is a valuable tool when dealing with temporary or unsettled conditions, but owning generally is economically preferable when the asset is to be retained throughout the major portion of its useful life. In the light of this experience, the following general guidelines have been developed and are offered for consideration:

1. *Buildings*—Equipment buildings should be owned except in very unusual circumstances. Headquarters buildings normally should be owned if occupancy is expected for a reasonable period of time or if expansion is contemplated. Garages, work centers, small headquarters buildings, space for remote TSPS switchboard installations, accounting centers, and business offices, etc. may be appropriate for leasing where the permanence of the location, occupancy with other tenants, or urgent early requirements for space are factors.

2. *Motor Vehicles*—Motor vehicles should be owned except when leasing is justified by an economic analysis. Short term leasing and occasional rental might be used for temporary peak demands.

3. *Equipment*—Equipment should be owned except for unusual conditions such as those relating to business machines.

The liabilities incurred as a result of entering into a financial lease are essentially equivalent in their nature to those incurred by outright purchase with debt financing. The lease commits the business to make a series of payments over a future period of time, and these promised payments are as much a fixed obligation as the interest and funding requirements of a debenture issue. The lease costs should be compared with cost of long term money which System companies can obtain from other sources, and such a comparison should include consideration of ability to refinance at more favorable interest rates a privilege we usually provide for in debt securities offerings.

The Securities and Exchange Commission considers certain leases in the same light as debt. Under the registration requirements of the SEC, interest coverage is measured in terms which treat appropriate portions of rentals under long term leases as fixed charges. The SEC also requires the disclosure of leases in registration statements if the commitment is material in amount. The Accountig Principles Board of the American Institute of Certified Public Accountants in its Opinion No. 5 has specified that generally accepted accounting principles require that certain leases be reported on the balance sheet of the corporation as assets and liabilities. These financing aspects, together with the economic considerations, substantiate the need for close study prior to entering into any lease agreement.

It is recognized that the question of leasing versus ownership must be answered with respect to circumstances surrounding specific cases. It is possible to structure leases on various bases, some of which may be more economical than debt financing. Therefore, if a situation arises in which it would appear advantageous in your company to enter into a lease agreement that does not conform to the general guidelines expressed above, we would appreciate the opportunity of reviewing the economic and other considerations involved.

Should your people have any questions regarding the above, they may contact Mr. Lish's people (Mr. H. E. Crampton) on the matter of economic analysis. As to other considerations, Mr. Hunt's people (Mr. C. E. Bruggeman) are interested in leases for motor vehicles, garages and service centers, Mr. Cave's people (Mr. D. F. Jones) in large buildings and equipment and Mr. MacIntyre's people (Mr. R. A. White) in computer equipment. Mr. Mason's people (Mr. A. V. Plumley) are interested in the financial and accounting aspect of all leases.

*Vice President—Operations.
Vice President—Construction Plans.
Vice President—Service Costs.
Vice President and Comptroller.*

Exhibit 71

C. MICA-BTS ARGUMENTS ANALYZED

MICA-BTS have attacked the proposed rates and the supporting cost studies on several bases:

(1) They have claimed that costs and rates must be related to each individual customer's installation, rather than rates being based on an average installation for a particular service, which results in uniform rates for the customers of that service. Whether pricing by individual installation is practical for vendors who sell equipment we do not know, for this Commission does not control such sales; but we suggest it is totally impractical for a regulated common carrier, which must render equal service to all who apply at just and nondiscriminatory rates. Many factors in addition to the cost of an individual installation must be considered in establishing reasonable rates for a common carrier. Among them are simplicity of understanding, ease of administration, stimulation of proper use of facilities, etc. It is neither good law or good ratemaking to claim that Michigan Bell's rate structures must be based on individual customer costs.

(2) They have claimed that rates are proposed on an anti-competitive basis in that they are being raised on those services where MICA-BTS are least competitive and reduced most on those services where they have been most successful. (T. 6237; 6498) * The charge of anti-competitive motives is * * *

* Also see BTS Petition For Leave To Intervene As a Party, p. 3.

Exhibit 72

MICHIGAN BELL,
Detroit, Mich., June 6, 1974.

Mr. PATRICK G. O'DONOVAN,
*Communications Department,
 Mount Carmel Mercy Hospital,
 Detroit, Mich.*

DEAR SIR: This is to advise you that Michigan Bell has undertaken a study to determine if there is a basis in fact that would allow us to consider a different rate treatment for the patient telephone served by Centrex service as compared to an administrative telephone and other general business Centrex telephones. In other words, if we find that there is a significant difference in the use of the patient telephone as compared to other Centrex stations we would have a reason to consider a different rate for the patient telephone.

This study is being conducted on a statistically selected sampling procedure. We anticipate the study itself to be completed by approximately September 1, 1974, with compilation of results and final determination completed by mid-September.

It may be advisable for you to defer any action of any sort on your telephone system until the results of this study are known and we will share with you at that time.

Sincerely yours,

C. R. BULTHUIS,
Account Manager.

Exhibit 73

DIAL PBX PROCESSING MANUAL

SECTION II, PAGE 19

October 1966.

Toll Diversion Type I—See Tariff 2, Sheet 41, also Section IV, Page 9.

Type I Toll Diversion is available with Series 100, 200, 300 and Class E Type II dial PBX systems where facility conditions permit.

Two classes of toll diversion are available: (1) to divert all long distance and multiunit calls and (2) to divert all long distance calls only.

This service may be provided with or without message registers. The registers will record all one-unit calls.

The diversion equipment will usually be located in the serving central office, but in some cases may be located in the dial equipment room on the customers' premises.

Since DDD provides the fastest and most inexpensive means of completing calls, it is the salesman's responsibility to sell his customer on the fullest possible use of DDD. Under no circumstances should Toll Diversion be actively sold to a customer. Where a customer requests this service, every alternative should be explored before accepting the order. Each request for this service should be reviewed by the District Sales Manager involved.

With Toll Diversion a station user attempting to dial an excluded code would be diverted. Depending upon circumstances, and facilities available, the call will be diverted to a distinctive tone, a recorded announcement, or directly to the PBX operator.

When the customer desires to restrict different groups of stations from different calling area codes, separate restriction arrangements are required for each different calling area and a different group of trunks is associated with each. For example, if a customer desires to divert 10 trunks from all toll calls and another 10 trunks from all multi-unit and toll calls, two Trunk Groups would be required. The initial charge of \$75.00 for 25 trunks or less would be applicable to each Trunk Group.

Where the customer has need for a group of local trunks and a group of FX trunks, the local group would be billed at Tariff rates. The FX group would require a 3906 for the rate treatment.

All requests for Toll Diversion must be cleared thru the Engineering Department (313-357-4551) before offering the service to a customer.

The following information should be provided :

1. Customer name, address and telephone number
2. Name of serving Central Office
3. Quantity of Trunks (at cutover and 5 years after)
 - Dial 9
 - Combination
 - FX (for Toll Diversion when different rate areas are involved)

Section V, Exhibit 5.4

Example of use with Toll Diversion Type I With Mess. Registers

MICHIGAN BELL TELEPHONE COMPANY

CONTRACT FOR TOLL DIVERSION TYPE I

Application For Service At ----- Exchange

The undersigned requests the Michigan Bell Telephone Company to furnish Toll Diversion Type I Service and equipment as specified below :

First 25 Trunks, or less @ \$75.00 per month.

Message Register-Common Equipment @ \$20.00 per month.

The undersigned also agrees to be bound by the rules and regulations now or hereafter established by the Telephone Company in its Tariffs or as specified herein, and to pay all charges made in accordance with lawful tariffs filed by the Telephone Company.

It is further agreed that the initial contract period is three (3) years starting with the date service is established, for each class of Toll Diversion provided.

Termination charges applicable in the event of discontinuance of Toll Diversion prior to the expiration of the initial contract period shall be an amount equal to 50% of the unbilled monthly charges for the unexpired portion of the contract period.

MICHIGAN BELL TELEPHONE CO.

Customer

Representative

Address

City

Approved

Approved

Date

Exhibit 74

MEMORANDUM ON INTERCONNECTION OF CUSTOMER PROVIDED EQUIPMENT

March, 1970.

A. POLICY

1. Background

The basic position of the Bell System regarding the connection of customer provided equipment to the message network has been that the Telephone Company should supply and maintain all equipment connected to the network in order to assure that customers receive the best possible service. This has prevented any "foreign" attachments to our network or to the equipment supplied by the Telephone Company.

2. Exceptions to Policy

This policy wasn't pure, however, there were several situations where it wasn't practical or desirable for the Telephone Company to provide all the facilities or equipment to serve certain situations, i.e. :

a. Locations inaccessible or hazardous to our employees, such as mines, elevator shafts, railroad and power company rights-of-way, etc.

b. Interconnection was also permitted in the interest of national defense or general public safety and welfare such as military bases, police and fire departments, etc.

c. Areas outside the basic business of the Telephone Company such as paging systems, customer-provided business machines, etc.

Execptions were granted later to allow attachments to our equipment of customer-provided miscellaneous devices which did not involve direct electrical connection and were not harmful to our equipment or the telephone user. These included voice silencers, ear pads, shoulder rests, hard of hearing attachments, etc.

Over the years, we have further liberalized our once rigid ban on all "foreign" attachments to allow the connection of customers provided decorator sets that have been modified to meet our specifications.

NOTE. The Antique Decorator Set practice is *not* affected by "Interconnection". Sets that meet modification standards will be installed under present procedures. "Interconnection" will be offered only in those cases where the customer's set cannot be modified or the customer requests an alternate method connecting a "customer owned" set.

With these interconnections that have been permitted, the Bell System retained the basic position that in order to provide the best service to all our customers, we must retain control of the network itself.

* * * * *

b. Interconnection and Competition Report Form

The purpose of the Interconnection and Competition Report Form (ICR) is to provide information relative to customer interest and demand for connecting arrangements and to provide the FCC Staff with certain quantitative data regarding interconnection services. It must be remembered that all interconnections must be authorized by the General Pricing Supervisor even though they may be covered by Tariff rates.

For Commercial purposes, the ICR form contains two pages (Exhibit 1 and 2). The use and flow of the forms is outlined below. Exhibit 1 is prepared in all cases, exhibits 1 and 2 are prepared in firm order cases.

Inquiry only: If the customer merely expresses interest in interconnection or requests a rate quote but does not place an order; the Service Representative will complete two copies of the ICR form (Exhibit 1). The original is forwarded to the General Pricing Supervisor and the duplicate is retained in a Business Office file. If it is necessary to return information to the Service Representative, such as rate quotes or acceptability of interconnection arrangement, it will be done on a verbal basis.

Firm Order:

Take information from customer, advise him that it is necessary to verify exact charge and acceptability of service requested. Make a "By two weeks" commitment to recontact the customer.

Prepare ICR form and VCA page in duplicate. (See Exhibits 1 & 2 for information required.)

Forward both copies of ICR and VCA to: General Pricing Supervisor—Planning.

Planning will return duplicate ICR with advice of acceptability.

Upon receipt of ICR from Planning, contact the customer and negotiate a firm order.

Issue a service order with the ICR form attached. Keep ICR form with the records until notice of order completion received (PC).

Post the completion date to the ICR form and return the ICR form to Planning.

Out and/or F orders: Prepare an ICR form, retain with order until PC received. Post completion date of Out or F order on ICR form and forward to General Pricing Supervisor—Planning.

* * * * *

Exhibit 75

* * * * *

Increasingly, customers are curious to know if they can obtain a service not available from Southern Bell and/or obtain this service for less money. Realizing this, Southern Bell has expanded its training for salesmen in the area of equipment knowledge and, as well, the course for which this manual is designed proposes to provide additional knowledge for our salesmen where cost comparisons between Bell and non-Bell equipment are concerned.

Competition has brought the Marketing Department in closer cooperation with other departments within the Company. In many areas of Southern Bell, the Marketing Departments exchange information on a regular basis with the Commercial, Plant and Directory Departments regarding customers who are considering purchasing their own system or of customers who have severe service problems and may be prime targets for competition. Some Plant Districts have moved ahead with increased preventive maintenance programs in order to reduce our vulnerability to competition. Marketing Departments throughout Southern Bell now have a greater exchange of ideas and information, such as competition alerts and conference calls between the various Marketing groups in a given area.

Contrary to what many private equipment suppliers might hope, the Bell System is not going out of the equipment business, and we are not getting out of the equipment-renting business either. Neither will we drive all our competitors out of business. Surely many of the interconnect companies will fold (a number already have), and some will merge with others and ????? new companies will be formed. Nevertheless, as long as the F.C.C. and the various Public Service and Utilities Commissions rule interconnection to be legal, there will be interconnect companies trying to sell equipment. What then, does the future hold?

Exhibit 76

COMPETITIVE ACTIVITY REPORT

Plant Staff has indicated that their line people will be submitting reports of competitive activity on their "Plant Sale Referral Report" form (see attached). This report will be forwarded to the Marketing Manager in whose area the customer is located.

THE COMPETITION STORY

A competition information program is presently being implemented throughout MBT in order to create awareness in our employees of our changing business climate. We also hope to generate a renewed commitment to providing our customers with the best service possible—our greatest asset in meeting competition.

All Departments are participating in discussions with many requests for Marketing people to attend and "localize" the competitive activity and its impact. Reports indicate that an inter-departmental session imparts greater significance to the subject as well as allowing for a healthy interchange of experience and concern.

MARKETING STAFF,

Product & Service Development.

Exhibit 77

[For Your Information]

RELATIONSHIPS WITH OUTSIDE COMMUNICATIONS CONSULTANTS

The guidelines that follow, concern our relationships with outside communications consultants.

1. GENERAL

The Telephone Company, while engaged in furnishing communications systems for use by customers, offers consulting advice as a necessary part of these systems. Consulting advice is provided as part of our service undertaking and is offered to the customer without additional charge. We are entitled to and do explain the value of our services. Some customers will want to obtain outside advice on the communications arrangements they should have and may not want to depend entirely on consultants of the Telephone Company. The retaining of an outside consultant by a customer is a matter for his own business judgment.

Our goal is to satisfy the customer's requirements. In some instances, customers may contact our representatives when they are considering whether

to retain an outside consultant. They may ask for our opinion on whether they should retain an outside consultant or retain a specific consultant by name. Explain that while we are competent to provide consulting advice, they are entirely free to retain an outside consultant. However, we should not recommend that customers engage the services of an outside consultant. Whether they do so is a matter for their own business judgment. Do not make any statements or inferences derogatory in any way of outside consultant services.

Once the Company is satisfied that an outside consultant is authorized to represent a customer in connection with his communications services, the Company accepts orders from and deals with the outside consultant in the same way it would accept orders from and deal with officers or employees of the customer.

2. VERIFYING THE AUTHORITY OF AN OUTSIDE CONSULTANT

The authority granted to an outside consultant by a customer may range from a review of existing service to the right to place all orders for service for the customer. Telephone Company Policy as well as Federal and State statutes and regulations require us to protect the confidentiality of communications records of customers. It is essential for that reason that the scope of authority given to the outside consultant be verified. Upon verification, act in accordance with the customer's directions.

A fundamental question with reference to the scope of authority is whether the customer wishes to continue to deal directly with the Telephone Company in certain matters, or whether he wishes the Telephone Company to deal exclusively with the outside consultant on all matters concerning the customer's communications.

If an outside consultant contacts the Business Office to obtain billing information, equipment itemization, place orders, etc., they should verify with Marketing that a letter of authorization is on file. If no letter is on file, they should request Marketing contact the outside consultant to obtain the proper authorization. If a letter is on file, Commercial should determine from Marketing the extent of the authorization granted to the outside consultant by the customer and furnish him any information or take any action that is proper under such authorization.

If the information or action cannot be given by Commercial, or is requested on a continuig basis, forward the request to Marketing in the same manner that other customer requests are handled.

PLANT

Requests for changes and corrections on active orders should be referred to Marketing for verification with the outside consultant prior to completion.

If Plant believes that the order changes are not in the best interest of the customer they should notify Marketing.

Requests not related to pending service orders should also be referred to Marketing.

TRAFFIC

If an outside consultant contacts Traffic to obtain PBX Traffic Observations, All Trunk Busy and Last Trunk Busy meter readings, etc., they should coordinate all such requests with Marketing.

Exhibit 77A

MARCH 2, 1973.

Mr. CLAUS:
Mr. MABIN:
Mr. PAWLOWSKI:
Mr. TREFRY:
Mr. WYRICK:

This is to review the attached forms which are for your use in contacting, controlling, and reporting our repricing customer contacts. GR-1, Key Repricing Contracts. GR-2, PBX Repricing Contracts. GR-3, Proposed Rate Comparison PBX. GR-4, Customer Response Summary.

Form GR-1 should be used as an assignment log as well as a managerial

control log of all key account customers contacted. Each manager should retain a master file for his crew's assigned and completed contacts for control purposes.

Form GR-2 should be used as an assignment and control log of all PBX customers contacted. A master file of this form should also be maintained by the manager. In addition, this form should be used to establish priorities on PBX accounts that must be repriced prior to a customer contact. Fill in the following columns and send them to Mr. Wyrick, who will coordinate with Commercial in having them repriced. Customer. Telephone number. Type of PBX (I, II, or III), Serving vehicle (701, 800A, 757, etc.), Remarks (indicate addition or deletion or features, etc., e.g., delete trunk answer any station).

In establishing priorities on PBX accounts, the following criteria are suggested: Pending competitive cases. Accounts under 60 stations that will be repriced (automatically) as PBX III service unless we change out the serving vehicle. Series 160 accounts with D.S.S. Vulnerable lines of business. Accounts with high key development. "Key Leader" accounts.

Form GR-3 will be sent back to you after the account has been repriced for use by the sales contact person in making the customer contact. It then should be filed in the Customer Information File with appropriate entries made in the Case History.

Form GR-4, "Customer Response Summary", should be used to summarize the previous 5 days contacts and given to me by 9:00 A.M. each Friday for consolidation and reporting to the Division Office.

Let me know if any questions or suggestions.

Attachments [Forms GR 1-3 not suitable for printing.] _____

MARKETING DEPARTMENT

CUSTOMER RESPONSE SUMMARY

(1973 Rate Case)

Reporting Group _____, report period ____/1973 thru ____/1973

Company Initiated Interviews—Key Leader and Business Customers

Number—approval _____	Summary of Disapproval Comments:
Number—no opinion _____	Local service rates _____
Number—disapproval _____	Toll rates _____
Total interviews _____	PBX and key restructuring _____
	Dir. assistance chg _____
	Nickel-A-Min. withdrawal _____
	Rate increase in general _____

Customer Initiated Comments

Number of favorable or noncom-	Summary of Unfavorable Comments:
mittal _____	Local service rates _____
Number of unfavorable com-	Toll rates _____
ments _____	PBX and key structuring _____
Total customer initiated _____	Dir. assistance Chg. _____
	Nickel-A-Min. withdrawal _____
	Rate increase in general _____

Exhibit 78

Exhibit 78 not suitable for printing.

Exhibit 79

MAINTENANCE OF SERVICE CHARGE

When a Michigan Bell repairman makes a visit to the customer's premise on a case involving COAM equipment on intrastate service and it is *clearly established* that the trouble is caused by the customers equipment, a visit charge of

\$15.00 shall be made on intrastate service or, \$10.00 on interstate service. The visit charge not only applies to those customers using the new connecting arrangements, but also to those presently using customer-provided equipment; (i.e., alarm devices, recorder announcement systems, all Data-Phone services, etc.). Further, the Tariff does not differentiate between authorized and unauthorized customer equipment. The maintenance of service charge applies in both cases. The charge will also apply even where the customer's maintenance needs requires the Telephone Company to regularly assign a repairman to the premises.

SALE OF CABLE FACILITIES

When customers replace Bell equipment or services with privately-owned systems the question may be asked as to whether we will sell our wiring or cables. As a company, we have five options as to the disposition of our material on a specific premise.

A. Retain ownership and use it for our purposes. This would be true where other Bell services are provided in the cable.

B. Retain ownership and lease to the customer on a monthly basis.

C. Sell the wiring outright to the customer.

D. Abandon the facilities in place. This would only be done in cases where they are not suitable for use.

E. Remove all wiring and cable from the premise for reuse.

No effort should be made to stimulate the sale of our facilities. Should the question be raised, a Form 3906 should be issued to obtain a decision and the appropriate charges if applicable. The form should be completed in detail showing such items which may influence our decision, such as building ownership, length of lease, other customer occupancy etc.

SALES INFORMATION SERIES

Issue 632B, July, 1970, Practice & Procedures

INTERCONNECTION

(Supersedes and cancels SIS 632A and Addendum)

Description of Procedures and Equipment

This Sales Information Series is being reissued to introduce the revised Interconnection and Competition Report form and to provide the Marketing field personnel with a source of reference material relative to the contact handling of interconnection cases. The following items are covered:

Marketing Policy.

Technical Requirements.

Interface Devices.

Entrance Facilities.

Maintenance of Service Charge.

Sale of Cable Facilities.

Interconnection and Competition Report Form (Revised).

Order Exhibits.

This information does not cover every facet of interconnection. Therefore, any questions which may come up should be referred to Staff through lines of organization.

GENERAL MARKETING STAFF, *Communications Operations.*

Exhibit 80

BELL SYSTEM PRACTICES, PACIFIC TEL.

Section 001-320-010PT, Issue A. September, 1972

SALE OF HOUSE CABLE AND INTERIOR WIRING SYSTEMS

1. General

101 This section outlines policies and procedures to follow when a request is received to purchase house cable and interior wiring systems.

102 It is issued to augment the information contained in System Instruction 48 for the special case of selling inside wire and cable systems.

1.03 Interconnecting rules make it possible for customers to discontinue the use of our equipment and to install customer-provided equipment. When a customer decides to install his own system, it is usually to his advantage to reuse existing wiring, rather than replace it. In many cases, it is also advantageous to the Company to sell the wiring system at a fair price, rather than to remove it and dispose of it.

1.04 As used in this practice:

(a) *Buyer* refers to the other party executing the purchase and sale agreement. In most cases, he will be either the customer or the vendor installing the equipment for the customer.

(b) *Cost Engineer* will mean the Plant Costs Engineer or the Engineering Supervisor (Nevada).

(c) *House cable system* may include all of the equipment described in 2.01.

2. Basic Guidelines

Plant To Be Offered For Sale

2.01 Only certain items of plant may be considered for sale. These items include the house cable (32C), station and inside wiring cable (28C), and associated terminals and connecting blocks (any station account) that can be exclusively used by the customer for providing his own service. Station apparatus and other equipment, such as PBXs, etc., are *not* to be sold.

* * * * *

of charging Plant and Engineering time to the proper account. Plant Service and Plant Engineering forces will report their time to account 139-39 when working on the inventory and appraisal. Any other work associated with the sale shall be reported to normal time reporting codes.

NOTE.—No KC (or project) number should be assigned unless it is requested by the Cost Engineer, since only one of these numbers will be assigned per sale.

3.03 The expenses associated with this inventory and appraisal are not to be billed to the buyer. They do not have a bearing on the structural value or on any other item billed to the buyer.

Structural Value

3.04 The structural value of the house cable system must be determined in order to set a sale price. The factors which affect structural value are:

(a) The amount and value of the material useful to the buyer that we are willing to sell.

(b) The amount and cost of the labor required to build a similar system.

(c) The present condition of the system.

3.05 In any plant purchase or sale, the structural value of the system to the buyer is the important consideration. When we are selling inside wiring and cable, the structural value is the amount it would cost the buyer to build a system adequate for his use at the location in question under existing conditions. This may be more or less than the original cost. It must take into account both the value of the material being sold and the quantity of plant that is useful to the buyer. Therefore, portions of plant which the buyer does not need are of no value to him. To explain this concept, assume we have a 100-pair cable installed in a system which a buyer wants to purchase. If he needs all 100 pairs, the value to the buyer is the full value of the cable. If he does not need any cable at that place, then it has no value to the buyer and we should remove it. If his ultimate needs could be met by only 22 pairs, then the value to the buyer is less than the full value of the cable. Under these circumstances, he would probably use a 25-pair cable if he were installing his own system. Therefore, our appraisal of the plant to be sold should be based on the 25-pair value plus the discounted salvage value of the other 75 pairs.

3.06 If a buyer forecasts facility requirements that do not appear reasonable, we should review them carefully. We must base our appraisal on an objective and accurate forecast of present and future buyer requirements so that we do not jeopardize our bargaining position in any future sales situations. Therefore, carefully evaluate requests to purchase facilities which state a need that is far less than the capacity of the existing system. In these instances, removal of the entire system or parts of it might be best for both the Company and the buyer. The Cost Engineer is responsible for making the final analysis and decision in questionable cases.

3.07 The material cost to be used when computing the structural value to the buyer is the current market price for the material the buyer would need in order to install his own system. The Cost Engineer will check local general trade prices and supplies catalogs to obtain these prices.

3.08 The number of man-hours necessary for the buyer to build the system, or that part of the system being sold, should be carefully estimated by a qualified Plant Engineer and/or Foreman. When cable in the 58C account is being inventoried, the Customer Service Engineer should estimate the buyer's installation time. This estimate should be made considering the building as it exists and any other current circumstances which would affect the time required to build that system.

3.09 The condition of the Plant to be sold shall be evaluated by those making the inventory. The condition of the system is generally expressed as a percentage called the condition factor. This is solely based on the physical and functional condition of the plant. Age and accounting depreciation amounts have no direct bearing on the condition factor. If the condition of the plant involved is essentially as good as new, a factor in the range of 100 to 90 percent should be used. If there are maintenance problems in the facilities that would require work to bring it up to standard, then the factor should be decreased accordingly. Plant that has deteriorated by 50 percent or more should probably not be sold, since it would be of little value to the buyer.

Exhibit 81

FEBRUARY 26, 1973.

MICHIGAN BELL TELEPHONE CO.,
Wyoming, Mich.

(Attention: Mr. E. F. Gietzen, District Sales Manager)

DEAR MR. GIETZEN: I received a copy of the letter sent to you on February 15, 1973, from a Mr. William Schneider of TPI Incorporated. As you know, Saluto Foods has agreed to buy a private telephone system from TPI, and I now find that Michigan Bell is giving us some serious problems due to what I feel is unnecessary delay.

Mr. Gietzen, I would like to hear from you soon as to the reasons why Michigan Bell suddenly changed their installation date from March 1st to May 1st. It appears that there is an intentional "dragging of the feet".

It is amazing to me how you could give us such a delay. When we were considering your equipment, you were able to install it by March 1st. Now, since we went to your competitor, we are getting a 60-day delay. I expect an immediate response from your office to ascertain what further action needs to be taken to get the installation in early March as originally agreed.

Sincerely yours,

JAMES P. DeLAPA, *President.*

Exhibit 82

TPI INC.,
February 11, 1974.

Mr. GRAHAM SMITH,
Headquarters Staff,
Michigan Bell Telephone Co.,
Detroit, Mich.

DEAR MR. SMITH: This letter is in reference to intolerable situations we are experiencing with Michigan Bell Telephone Company in the conduct of our day to day business. These problems have been brought to your attention and that of other upper management personnel in your company to no avail.

While we have not cutover a customer owned telephone system since November 1973 without a MBT caused problem, we have only summarized those problems encountered in the past 30 days. Names, dates, correspondence, and other such data will be promptly supplied if needed. However we feel the following situations are indicative of a detrimental attitude and concerted effort to inhibit the growth of interconnect on a company wide basis. These examples are:

Brody Bilt Construction

TPI ordered interfaces/lines two months prior to cut. On day of cut, interfaces—no drop service into building. After repeated calls, MBT refused to put

in service as there was no entrance hole into building. Day after cut TPI installed MBT drop attachment and entrance hole into building.

Samuel Brody

TPI sent letter of requirements four months prior to cut. Day of cut, MBT had not written out order, therefore, no intercept of disconnected service. Everyday following cut, MBT said their mistake would be corrected that day. Five days after cut, situation corrected.

American Title

TPI ordered leased pair one month prior to cut. We confirmed three days prior to cut; MBT said OK. Day of cut, MBT said there were no cable facilities. 15 days after cut; still not in.

Plante Moran

Customer reported three trunks out. TPI determined MBT problem. MBT said was TPI problem. TPI repeatedly called for repair—30 days later MBT discovered problem was theirs i.e.

- 1—Loop start rather than ground start.
- 1—Open pair.
- 1—Bad CDH interface.

Montgomery Wards

A variety of problems were encountered:

- 1. 101A issue CDH not properly terminated.
- 2. 101B issue CDH not strapped. TPI corrected as MBT left premises without testing.

3. Tie Lines:

- A. MBT did not start testing Tie trunks until 4:00 PM of day following cut.
- B. Allen Park location—CO problems which TPI had to direct correction of.
- C. Premise of Wards—24V repeater had troubles which TPI again had to correct.

D. 10:00 PM two days after cut Tie trunks were turned on but overall MBT tests had not been performed—MBT elected to test two days later.

E. Afternoon four days after cut, MBT started testing, claimed two troubles in TPI services; TPI man again had to tell MBT how to properly test at which time MBT found problems to be theirs.

Sterling Motel

TPI started cut at 10:00 AM. MBT disconnected entire service without any of new lines installed. 2:30 PM no intercept, loop start lines rather than ground start, toll terminal not working, two trunks not working at all. After repeated calls, TPI finally got intercept and other services at 5:30 PM except no toll terminals.

Carpet Center

Customer called MBT Engineers as remodeling and needed cable moved. Customer asked if he could cut cable, pointing out main feeder cable—MBT Engineer said yes. Customer cut cable putting himself out of service. MBT refused to splice cable when called. After repeated calls by TPI, MBT spliced cable eight hours later.

Gage Brukoff

Customer reported three trunks out. TPI determined MBT problem. MBT said TPI problem. Two days later, MBT determined was their problem, i.e.,

- 2—Cable problem.
- 1—CDH defective.

Central Heating

Customer repeatedly reported one line out of service. MBT insisted TPI problem. Three days later MBT determined their problem i.e., bad cable pair.

Alsan Medical Clinic

TPI ordered STP interface due February 6, 1974. TPI notified MBT incorrect interface installed, no drop to building on February 6, 1974. MBT promised to correct February 8, 1974. On February 11, 1974, problem not corrected, customer without service.

Hiller-Lutcy

TPI ordered service due February 2, 1974. TPI notified MBT on February 8, 1974 incorrect interfaces installed. On February 11, 1974 problem still not corrected. Customer without service.

Obviously, this harrassment and deterioration of service to our mutual customers is not in the framework of the law nor in the spirit of your company's stated position on interconnection. Further, it is a situation which must immediately cease.

Our entire company is committed to working with yours over the next thirty days to resolve these problems. We will meet with you at your convenience to establish whatever procedures you feel are warranted.

If however, we cannot eliminate these problems in the future, other actions will necessarily be taken. In many conversations with you, you have expressed dismay and disgust for the aforementioned problems and we are confident that through our joint effort, they can be resolved to our mutual satisfaction.

Sincerely,

RONALD B. FOX,
Vice President.

EXHIBIT 2.—*Letter From Elgin Electronics, Inc., Re Delivery Schedules for Elgin Couplers*

ELGIN ELECTRONICS INC.,
Waterford, Pa., May 17, 1974.

MR. GERALD HELLERMAN,
Antitrust and Monopoly, Senate Subcommittee
Washington, D.C.

DEAR MR. HELLERMAN: This will confirm our telephone conversation of May 16, 1974 relative to your question on the delivery schedules of Western Electric for Elgin couplers.

Upon instructions to ship from either Western Electric or one of our independent telephone customers, shipment is made from stock in a matter of one or two days. Occasionally we are faced with stock outages due to one of our component suppliers failure to deliver to us per our request. In todays electrical component market, manufacturers of some items i.e. capacitors or transistors have extended normal lead times of 6 weeks to as long as 50 or 60 weeks. As a result of this condition they have not always been able to meet their promised deliveries. However, the situation is easing and despite this problem we can normally deliver our couplers from stock.

Yours very truly,

E. S. WILLIS, *President.*

ELGIN ELECTRONICS INC.,
Waterford, Pa., May 14, 1974.

MR. GERALD HELLERMAN,
Antitrust and Monopoly Senate Subcommittee,
Washington, D.C.

DEAR MR. HELLERMAN: This will confirm our telephone conversation of May 13, 1974.

Elgin has been a sub-contractor to the Western Electric Company for the past fifteen years. Our service to them has included the manufacture of amplifiers, test sets, power devices and couplers. We are also licensed by them to manufacture certain power devices and couplers for our sale to the independent telephone companies. I have enclosed copies of our advertising literature on these products offered to the independents.

Our contracts are directly with Western Electric for a specific number of units to be manufactured normally within a one year period. They direct us to ship items to the various Bell operating companies as needed.

Yours very truly,

E. S. WILLIS, *President.*

Enclosure

TELEPHONE PRODUCTS

MASTER
PRICE
LIST

PAGE 1

MODEL NO.	MODEL DESCRIPTION	LIST PRICE*
GROUP 1		
VOICE COUPLERS		
ERC 19522-1	RECORDER COUPLER.....	\$126.50
ERC 19522-2	RECORDER COUPLER (With-11 Voice Card).....	170.50
ERC 19522-11	VOICE CARD ASSEMBLY.....	38.50
ERC 19522-1-2W	RECORDER COUPLER (2-Way Comm.).....	137.50
ERC 19522-2-2W	RECORDER COUPLER (2-Way Comm.).....	181.50
ERC 19645-2	RECORDER CONNECTOR.....	154.00
ERC 19645-2RC1	RECORDER CONNECTOR.....	143.00
ESC 20721-1	STATION COUPLER.....	136.50
ESC 20721-2	STATION COUPLER (With-12 Voice Card).....	194.25
ESC 20721-3	STATION COUPLER (With-13 Limiter Card).....	194.25
ESC 20721-4	STATION COUPLER (With-14 Ring Card).....	182.70
ESC 20721-5	STATION COUPLER (With-11 Pulse and-14 Ring Cards).....	236.25
ESC 20721-6	STATION COUPLER (With-11 Pulse Card).....	204.75
ESC 20721-10	HINGE ASSEMBLY.....	6.30
ESC 20721-11	PULSE CORRECTOR ASSEMBLY.....	53.55
ESC 20721-12	VOICE CONTROL ASSEMBLY.....	43.05
ESC 20721-13	LIMITER ASSEMBLY.....	43.05
ESC 20721-14	RING SUPPLY ASSEMBLY.....	31.50
ESC 20721-15	TEST SET ASSEMBLY.....	94.50
EC 30-A	VOICE COUPLER.....	20.90
EIU101A	AUTOMATIC 2-WAY GROUND START CARD.....	130.00
EIU102A	2-WAY OR 1-WAY LOOP START CARD.....	106.00
EIU108A	MANUAL LOOP START CARD.....	53.00
CDH'6 PACK'	CABINET ASSEMBLY.....	201.00
GROUP 2		
DATA COUPLERS		
EDC 1000A	MANUAL DATA COUPLER.....	\$ 84.00
EDC 1000B	MANUAL DATA COUPLER.....	123.40
EDC 1001A	AUTOMATIC DATA COUPLER.....	157.50
EDC 1001B	AUTOMATIC DATA COUPLER.....	120.75
GROUP 3		
COUPLER ACCESSORIES		
2012A	TRANSFORMER 6-8 VAC @ 1.75VA (Accessory for Model EDC 1000B).....	\$ 7.20
2012B	TRANSFORMER 16-18 VAC @ 2.25VA (Accessory for Models ERC 19645-2 & ESC 20721-1).....	7.20
120386	TRANSFORMER 24 VAC @ 2.5VA (Accessory for Model EDC 1001A).....	8.00

*ALL PRICES F.O.B. WATERFORD, PA
SUBJECT TO CHANGE WITHOUT NOTICE

**ELGIN ELECTRONICS INCORPORATED**

Subsidiary of Basic Incorporated

General Offices and Manufacturing: Walnut Street, Waterford, Pennsylvania 18441 • TWX 510-899-6859 - Phone (814) 798-2801

EXHIBIT 3.—Correspondence Re Requests to Mountain Bell to Supply STC-List 14 Interconnecting Units

**MOUNTAIN BELL,
El Paso, Tex., September 7, 1972.**

JIM HAMPTON,
*Director of Marketing,
El Paso Telephone Co.,
El Paso, Tex.*

DEAR MR. HAMPTON: You have requested our company to provide interconnecting units commonly referred to as "STC-List 14" for the purpose of an interface between the lines and facilities of Mountain Bell and various multi-line key system equipment being sold or leased by your company to third parties for their use.

You should be aware that the STC-List 14 is not presently offered by our Company as one of its regular tariff items; and particularly it is not normally offered by our Company under any circumstances as an interface with key systems.

We assume that you have available to you the Bell System Technical Reference PUB 42208, revised April, 1972. We direct your attention to Section 1.2 at Page 2 and Section 4.3 at Page 16. As is there indicated, the STC-List 14 was not designed for use with key systems.

Our Company has experienced difficulty in other states where attempts have been made to use the STC-List 14 as an interface with key systems. The problem has arisen primarily in attempting to have the STC-List 14 provide ringing for the key equipment. However, it is possible that your equipment may function without causing any difficulty.

If, despite the above information, you insist on using that device as an interface, we will provide it on the following terms and conditions:

1. This is a temporary, test offering and not a regular tariff item. As such, it will be provided on a special-assembly basis only.

2. This test offering is being made in the State of Texas only. In any other state in which Mountain Bell operates, the STC-List 14 will only be provided as an interface for key systems after an appropriate hearing and order from the state regulatory commission.

3. In the event that the use of the STC-List 14 as an interface with key systems caused that interface to malfunction, we will no longer provide it and will withdraw the STC-List 14 from those customers then using it.

4. In the event that it does become necessary to withdraw the STC-List 14 as an interface with Key Systems, customers then being served by it will have to comply with the then applicable Rules and Regulations of the FCC and any tariffs, rules and regulations on file by this Company with appropriate regulatory bodies. At the present time, these rules and regulations do not permit direct electrical connection of customer-owned equipment to the Telephone Company facilities except through an interconnection device.

5. We will appraise our joint customers for whom such devices are ordered of our Company's position and of the terms upon which we are providing the interconnection units.

We will, to the extent possible, appraise you of our experiences with the STC-List 14 insofar as they concern any troubles related to use as an interface with Key Systems.

Your attorney, Mr. Sheehey, in conversations with our Company attorney, Denis G. Stack, indicated that he had information that Southwestern Bell and Illinois Bell were using two outside manufacturers of the STC and could provide them within a two-week interval from the date of a firm order for installation. We mention this because it has been our Company's experience that, in fact, an interval of four weeks has been more realistic; and recently supply problems have, in some cases, increased that interval even further. Mr. Sheehey was very general in his remarks, and we have been attempting to ascertain the names of the outside manufacturers or the names of any persons in purchases. Inquiries made to date by our General Office have not shed any light upon this situation. Our best information is that the System specifications is the Elgin Company and that its entire production is being purchased by Western Electric who, in turn, supplies all of the Bell System Companies, including Mountain Bell. Unless these units can be obtained from some source other than Elgin and Western Electric, you should be aware that there may be problems meeting the interval of 28 days or four weeks after

order. We would appreciate any detailed information you can provide as to outside suppliers.

Please direct all inquiries concerning installation intervals to me at telephone number 543-2424, I will have responsibility for coordinating contacts between Mountain Bell and your company. I will also furnish you the current prices for STC-List 14 equipment.

If you have any questions, please feel free to call.

Very truly yours,

JACK JOYCE,
Marketing Manager.

EL PASO TELEPHONE CO.,
September 8, 1972.

MR. JOHN LANGFORD,
El Paso, Tex.

DEAR JOHN: As per our personal telephone conversation of today, please find enclosed a photocopy of a letter written September 6, 1972, by Mountain Bell Telephone Company to H. Carroll Lee Construction Company.

Your immediate attention to this matter will be appreciated as we cannot let Bell continue this type of harassment.

Sincerely,

K. D. WARFIELD, *President.*

MOUNTAIN BELL,
El Paso, Tex., September 6, 1972.

H. CARROLL LEE,
H. Carroll Lee Construction Co.

El Paso, Tex.

DEAR SIR: We have received an order for three STC-List 14 interconnect devices from the El Paso Telephone Company acting as your agent. These devices are to be used as an interface between your multi-line key system telephone equipment provided by El Paso Telephone Company and the facilities of Mountain Bell.

These devices are not provided or offered by Mountain Bell as one of its standard tariff items for use with key system telephones. They were not technically designed to be used as an interface for key systems; and you may or may not experience trouble with your equipment. However, we do offer other devices for use with key systems.

We will provide these devices on a special-assembly basis. If, the use of the STC-List 14 as an interface with your key system caused the interface to malfunction, we will no longer provide and we will withdraw it from those lines which it may be serving.

In the event that it does become necessary to withdraw the STC-List 14 as an interface with your key system, you will then have to comply with the then applicable Rules and Regulations of the FCC and any tariffs, rules and regulations on file by this Company with appropriate regulatory bodies. At the present time, such rules and regulations do not permit direct electrical connection of customer-owned equipment to the Telephone Company facilities except through an interconnection device. It will then be necessary for you to modify or reconfigure your equipment to meet whatever interconnection devices which would be available at such time.

If you have any questions concerning this matter, please feel free to call upon me. 543-2424.

Sincerely,

J. E. JOYCE,
Marketing Manager,
Interconnection Coordinator.

EXHIBIT 4.—*Letter to Jim Korte Re Point West, Inc., Decision to Stay With Michigan Bell*

POINT WEST,
October 16, 1973.

MR. JIM KORTE,
TPI, Inc.,
Grand Rapids, Mich.

DEAR JIM: We finally had our meeting with Jack Brackett and have decided to stay with Michigan Bell at least for the time being.

Since you spend a lot of time with us, which we appreciate, I feel that you are entitled to know the reasons why we made this decision. First of all, the interface charges which you said would be applicable were considerably lower than what Michigan Bell has indicated to us. Secondly, within a very short time we will be on the "measured usage" system which is going to provide a great deal more income to Michigan Bell—hence, they anticipate passing on some of these savings by reducing their equipment rates to their customers. Thirdly, and particularly in view of the measured usage approach, there is always a possibility that some of the independent companies may feel the competition very strongly and perhaps go under. According to the information we have, this has happened in a couple of other states already.

We will be happy to reconsider our position from time to time and of course whatever action we take will depend on the situation at the time.

Again, thanks for your time and patience.

Cordially,

EXHIBIT 5.—*Paper Re Telephone Company Relations With Independent Communications Consultants*

"INDEPENDENT" COMMUNICATION CONSULTANTS

INTRODUCTION

In recent years, there has been a significant increase in the use of consultant services by management. This is true for a broad range of advisory activities such as legal, public relations, advertising research, and communications. By the same token, there has been a significant increase in the number of firms providing these services.

It is because of these increases in consultant services that this material has been prepared. Our intent is to provide you with background information relative to consultant services in general and communications consultants in particular.

The ensuing material covers such matters as:

The functions and roles of independent consultants.

How independent consultants operate.

Case histories.

Contractual agreements.

Telephone Company relations with independent communications consultants.

BACKGROUND

It has been fairly common practice for many business customers to employ Certified Public Accountants, bookkeeping firms, etc., for purposes of financial advice and assistance. In many instances, and as a part of their routine analysis, these outside advisors have made an effort to review the business customer's telephone service and billings. Generally speaking, these advisors are ill-equipped to handle this task as they lack the knowledge and background of communications services and equipment. If questions arise concerning these matters, they normally contact the Business Office or a Marketing Representative for an explanation.

On the other hand, there are a number of small communications sales organizations who are strictly hardware oriented. Their primary objective has been to sell such items as intercom, paging, and Dial PBX Systems. They have not been concerned with the business customer's total communication package.

This picture is rapidly changing. As previously indicated, there has been a significant increase in firms offering communication consultant services and also in volumes of business. For example, consider Teleconomy National, a national consulting firm. It is reported that it grossed only \$29,000 in its first year of operation (1961); however, this volume rose to approximately \$2.2 million in 1966.

Further, the Charles W. Schwitzer Associates, New York, recently stated that they expect in one year (1966-1967)—to double their earnings to \$30,000.¹

In another case, an individual consultant located in Seattle grossed \$10,000

¹ Terry, Parke D. "Outside Consultants Help More Companies Slash Telephone Bills" Wall Street Journal—Date Unknown.

in his first seven months of business and expects to gross \$30,000 a year in fees within the near future.²

These consultant firms confine their consulting activities to the field of communications. But by the same token, they are concerned with all aspects of the business customer's telephone service. This includes services, equipment, and billing.

Some general situations, which are more likely to cause customers to seek help from outside consultants, are as follows: Drastic cost reduction needs arise, a one-time problem must be solved, specialized skills are needed part-time, an independent, outside viewpoint is desired, employee growth is getting out of hand, a new company or program is being organized, and an organization has experienced sudden and major changes in growth.

Thus far, our discussion has largely centered on "independent" telephone consultants. However, we should not overlook "independent" data consultants and the impact they may have on present and future data services offered by the Telephone Company.

Electronic data processing has brought an unprecedented boom to the management consulting field. In less than a decade, the number of consulting firms active in EDP services has grown from practically zero to a current estimate of over 3,000. This figure includes the small and medium-sized firms, the 100 or so giants of the industry and a host of individual practitioners. Total billing for EDP consulting assignments in 1967 will probably hit near the \$400 million mark. Many experts predict that by 1970, the figure will top \$1 billion. Considering that gross 1966 billings for all consulting firms in North America were approximately \$725 million, according to the Assn. of Consulting Management Engineers, Inc., one can readily determine the impact EDP is making in the consulting industry.

While the data processing bonanza continues to bring joy and prosperity to most consultants, the bill-paying client is often less than enthusiastic regarding the end result. A survey of the experiences of 202 companies with management consultants, conducted and released last year by the Dartnell Corp., indicated that 29 percent of the firms reported some sort of dissatisfaction with the outcome of their consulting experiences; 27 percent were so completely disenchanted that most of them indicated that they would not hire a consultant again under any circumstances. Said one executive: "After the experience we had with one of the top consulting firms, I wouldn't touch another consultant with a ten-foot pole. They almost ruined our business. They sent in a team of three bright young men . . . who picked the brains of our people and then presented a report that would have increased our expenses several hundred thousand dollars a year. Actually, they did sell us an electronic subscription system claiming it would save us time, money and effort. It was a disaster; cost us \$80,000 more the first year of operation. We threw it out a year later."

The long standing problem, where management and EDP are involved, is that in a majority of cases management knows neither what to ask nor what to pay for. Coupled with the lack of management ability at the EDP operating level, this situation has created a lucrative field for consultants. As to be expected, the field has its share of impostors; there is always the possibility that management and consultant end up playing an expensive game of the blind leading the blind. Despite this hazard, the competent EDP consultant can play a valid and valuable role for management.

At any rate, the EDP consultants, the good and the bad, have become a permanent part of the business scene. Certainly they are not essential to success, as many companies have proven. But, when qualified and properly utilized, the evidence seems to say that the EDP consultant can make a worthwhile contribution to any business.³

Operating Methods

Customer Approaches

Let us now examine how an independent communications consulting organization works with a client.

Generally speaking, the consultant organization utilizes one of the two following approaches in their initial contact with prospective clients:

² Wall Street Journal 8-3-67—A Special Background Report on Trends in Industry and Finance.

³ Keller, Arnold E.: "EDP Consultants—Pro & Con", Business Automation, November, 1967, pp. 34-35.

1. *The extrinsic*—This approach is used when the consultant organization has only minimal understanding of the client's problem, and its primary emphasis is on extolling its own problem-solving abilities via such devices as: describing a generalized approach to most problems ("persuasion by method"); describing the abilities, experience, etc., of key personnel in the firm ("persuasion by personnel"); or describing specific problems solved for other clients ("persuasion by success story").

2. *The intrinsic*—This approach is applicable when the primary emphasis of the consultant organization is on coming to grips with a problem of interest and importance to the client, which it shows, for example, by indicating a grasp of the problem in sufficient magnitude to generate both confidence and interest in further discussion, then taking a tentative "pass" at the problem with further discussions and/or memoranda, which reinforces the initial confidence. Presumably, this promise would later be fulfilled by actually conducting a project (in terms of specific information, recommendations, action programs, etc.) in such a manner as to fully justify the initial confidence.

Unfortunately, the extrinsic approach is all too often the way that consultant services are sold and bought. At the same time, the value of the better service organizations rest on those situations where their services have been purchased on intrinsic considerations.⁴

It is important to note that, in an effort to gain a toe-hold, one of the first efforts of the consulting organization is an offer to review the customer's telephone bill from the standpoint of billing accuracy.

Their objective is to establish customer confidence in their ability by seeking some evidence of a billing discrepancy. The likelihood of this occurring, as we know, runs rather high.

The reasons for this are manifold, but let's consider for a moment the views of one writer on this subject:

The pent-up demand for service since World War II has sometimes caused telephone companies to use whatever equipment was available—not always the most suitable type—to provide service to their customers.

In addition, many of those customers were also rapidly growing firms whose needs were constantly expanding and changing. That further aggravated the problem of trying to use the relatively old telephone equipment to satisfy those advanced requirements.

Changes in telephone communications; e.g., Direct Distance Dialing, All Number Calling, etc., as well as the introduction of newer and more efficient subscriber telephone equipment created other problems for the telephone companies. These sometimes resulted in older customers changing needs being neglected in order to satisfy the increase in newer customers and their service demands.⁵

The thoughts may be biased or slanted but we should recognize that this viewpoint is valid in many respects.

Further, we should also consider that some business customers may be skeptical, if not suspicious, of the telephone company's eagerness to analyze the telephone needs of their business. Many business customers feel that the telephone company would only try to burden them with more fancy equipment. For example, an executive of an import-export concern in San Francisco declared, "It is honestly my opinion that the telephone company couldn't care less about saving its customers any money."

The "Independent" consultant relies on the general inability of the client customer to interpret or understand the telephone company's method of billing and coding of equipment or services. Once a toehold is gained, the consultant organization usually recommends a complete analysis of the client customer's telephone service. If an agreement is reached, (the contractual agreement itself will be discussed later), they will proceed with the analysis. In many instances these consultant organizations employ former telephone company employees, but this is not always the case.

Study Approaches

The method of operation used in conduct of the analysis may proceed along the following lines:

⁴ Wittreich, Warren J.: "How to Buy/Sell Professional Services", Harvard Bus. Review, March/April, 1966, Vol. 44, No. 2, p. 123.

⁵ "How a Telephone Consultant Works with a Client". The Office, May, 1965, pp. 13-15.

1. A traffic flow study is made by a service observer. Information learned from this study is transferred to traffic flow charts to illustrate the actual need for, and adequacy of, the equipment.

2. The client's equipment billing is obtained from the telephone company and compared with an actual physical inventory.

3. An audit of telephone bills for many months or years back is made to recover any money due the customer because of past billing errors.

4. A study is made of telephone company tariffs pertaining to the client's case to see if additional savings are possible.

5. On dial accounts, the switching equipment is observed. Comparisons are made between the actual amount of switching equipment in use and what is actually needed.

6. When all this information is accumulated, it is assimilated for an in-depth analysis. The complete report on the existing system is gone over thoroughly in a conference of members of the consulting organization. Out of this conference may come recommendation details and plans for a more efficient and economical system for the client.

7. This report is then condensed into a proposal, for presentation to the client.

8. Upon acceptance of the proposal, the consulting firm often goes to work as the client's communications consultant and negotiates with the telephone company to handle all dealings with them in acquiring and installing improved equipment. They may also work with telephone company installers and engineer the new system.

9. Finally, they instruct the clients personnel on how to use this new system most effectively and economically, and how to insure proper billing.

As an outgrowth of this agreement, many consulting organizations are retained by their clients on a monthly or annual basis to supervise the telephone systems through frequent changes and expansion programs.

When considering the foregoing methods of operation, two things should be borne in mind:

1. Most communication analyses are not this comprehensive. This is especially true with respect to smaller, non-PBX customers. However, this method of operation will frequently be used by a consultant organization when analyzing the services of a PBX customer because of the general complexity of service and the greater opportunity to effect savings.

2. Many consulting organizations do not have the facilities, manpower or technical know-how to undertake an analysis as just described. While there are a large number of capable consulting organizations, there are, by the same token, a large number of smaller, less capable, organizations.⁶

CASE HISTORIES

Up to this point we have discussed, in broad terms, consultant organizations and the role that they play in effecting "savings" or "efficiency" for our business customers.

Let us now examine a few examples where "savings" were actually effected by consultant organizations. While these examples may not be typical, they at least serve to illustrate the impact they have had on our business customers.

1. Hamady Bros., a retail grocery chain headquartered in Flint, recently brought in Arthur Anderson & Co., a Detroit based Certified Public Accountant firm, to review their entire corporate organization. The objective of this review was to reduce operating costs where possible.

The Anderson Company recommended that the firm of O'Donovan & McLean Associates, "Independent" communications consultants, be brought in to analyze Hamady's telephone service. In addition, they recommended that the telephone company also be asked to make a similar review.

We were given the opportunity to come in first. As a result of our review we made the following recommendations:

A. Removal of an elaborate Call Director System which was used by the recently deceased president of the firm.

B. Removal of several INWATS lines at the headquarters office. These lines had been used to call in orders from outlying store locations such as Ypsilanti,

⁶ The Office, *Ibid.* pp. 16-25.

Midland, Ann Arbor, and Pontiac. These same stores were closed shortly before this review took place.

C. A reduction of one off-premises station (FPT) which was used to provide service at an outlying store.

O'Donovan & McLean then made their review. Their recommendations were substantially the same as ours. This being the case, they were accepted by the customer.

In addition to the foregoing recommendations, O'Donovan & McLean also recommended:

A. Addition of a second Dial PBX position which would be used primarily as secretarial service for the executives of the company. (At one point, O'Donovan & McLean indicated that they would recommend two positions of Manual PBX if we didn't go along with their recommendation for the Dial PBX position. They subsequently backed off and Hamady accepted our recommendation that the second Dial PBX position not be installed).

B. Removal of Business Interphone Systems located in ten different stores and installation of comparable privately owned systems. Hamady's maintenance people were opposed to this recommendation because of past experience with private systems—the maintenance costs were excessive. Ultimately, this recommendation was rejected.

The overall annual revenue loss to the Telephone Company, due to this review, was approximately \$5,000. However, the major part of this loss, due to service reductions, would have been incurred anyway because of Hamady's cut back in store operations.

Overall, Hamady was very satisfied with our handling of the review. Furthermore, they have since reinstalled a portion of the key telephones that were removed at the time of the initial review because of an increase in business; more important, the customer has expressed confidence in our consultants as they no longer utilize the service of O'Donovan & McLean.

This leads us up to an important point: Telecommunications is our business. We are experts in the field. We have a wealth of knowledge, experience and resources at our disposal. When confronted by "independents", we should remain objective and demonstrate our competency by making use of the factors just described. Service and equipment are generally installed because of a need. Reiterate the needs and benefits, if the needs still exist. If the need no longer exists, it may be advisable, under the circumstances, to recommend removal.

2. The Valeron Corp., Oak Park, recently obtained a \$3,600 refund. An "Independent" communications consultant audited this customer's service and found that the customer could obtain a monthly savings if he took advantage of a channel charge option. (In July, 1966, our channel charge treatment was changed. Under the new treatment the customer had the choice of two options; i.e., Option I—a non-adjacent block channel charge of \$5.00 per month or Option II—a basic charge of \$100.00 per month plus a channel charge of \$8.00 per channel, per month). The channel charges for this customer should have been repriced at the time of the rate change to provide the most favorable treatment of the customer. We failed to do so.

3. A recent refer from Cummins Diesel Sales Corp. of Detroit indicated that the customer wanted to know how long it would take to have a 555 PBX installed—the customer had a 756.

Our representative was asked to contact a person who he later learned was an employee of Communications & Paging Inc. This person had obtained written authorization to act as an agent, in respect to telephone service, for Cummins.

When we made our contact at the customer's premises, we learned that a "Centrum" intercom system had been sold to the customer. Contracts were signed and the equipment was in the process of being installed. (We couldn't determine if this equipment was purchased outright or on a lease basis.) Attempts to save the 756 were to no avail.

Why did we lose out to a competitor? Sometime before this incident took place, the customer apparently indicated some dissatisfaction with certain aspects of our service. As a result of our initial contact we requested a traffic study. However, about this time there was a realignment in sales crews which resulted in a transfer of records from the Bell Building to the North and Suburban sales office. The Traffic Department was slow in making a traffic study and we failed to make the necessary follow-up. When the study

was finally completed, it indicated that the Cummin's operator was spending too much time trying to locate people. The study also indicated a need for a paging system plus some additional key equipment.

The customer did not agree with our study and recommendations. It would appear that, shortly thereafter, he called in the "Independent" consultant for advice. The "Independent" consultant was able to supplant our 756 service with a private, combination intercom/paging system.

Our representative made a follow-up after a "Centrum" system was installed. He found that the person who initiated the request for the change in service was satisfied, but others in the organization were not.

Our net loss on this sale was approximately \$60.00 per month because additional lines and key equipment were installed.

Everything considered, the customer's overall costs for telecommunications are much greater now than they would have been if he had retained the 756 and had made the suggested improvements.

4. In another case involving a Michigan based retail supermarket chain, an "Independent" communications consultant firm obtained a written authorization to review the customer's telephone service. The agreement stipulated that the consultant firm would receive 50% of any savings effected.

We had recently arranged for the installation of a dial system with off-premises stations to outlying stores. These stations were arranged for alternate use—voice and data. The primary use of these stations was for inventory control.

The "Independent" reviewed the service and provided a written summary which recommended the removal of the dial service and the installation of a manual PBX in its place.

The "Independent" also reviewed this proposal with our representative before making his presentation to the customer. At this time, the "Independent" offered our representative a monetary inducement if he would "go along" with the proposal. Our representative, of course, refused.

This independent's proposal was ultimately given to the customer. However, the customer refused to accept the recommendations that were outlined.

5. A short time ago, the McCord Corporation advised us of their interest to "T & F" the dial service provided at their corporate office. "T & F" locations are both located in Detroit.

Somewhat about the same time, McCord acquired the services of a private management consulting firm (efficiency experts) to review their entire corporate organization.

Shortly after the management consulting firm came on the scene, they recommended to McCord that an independent communications consultant firm be contracted for the purposes of analyzing the corporation's entire communication network.

McCord apparently agreed to this recommendation as they acquired the services of Telcon Associated, Inc., of Hoboken, New Jersey. It is our understanding that Telcon employs salesmen who cover the field in an attempt to secure new accounts. After the salesman obtains a new contract, communications engineers are brought in. In the McCord case, we are dealing with a former chief engineer who had been employed by New York Bell for 19 years.

Fortunately for us, Telcon came in after we had completed our preliminary reviews and recommendation for the new basic dial package. Telcon agreed with our basic recommendations and contracts were signed to this effect. However, Telcon, acting as the McCord agent, are handling all departmental reviews. Orders for supplemental services will be provided by Telcon.

From what we can ascertain at this point, it would appear that Telcon will also review McCord's entire communications network which encompasses several plants and offices located throughout the country.

6. Approximately a year ago we received a refer from General Linen and Supply Co., Detroit, which indicated that they were being over-billed for some services and wanted an adjustment. Secondly, it stated that they wanted to make a change in the type of service provided.

In contacting the customer, we learned that O'Donovan and McLean had already reviewed the service and recommended the removal of the existing key cabinet system and 6A Intercom. O'Donovan recommended that this service be replaced with a manual PBX.

O'Donovan's recommendations were accepted by the customer. We lost money as a result. In addition, our investment was increased.

It is interesting to note that O'Donovan got his "foot in the door" after a review of our billings. He claimed that we were over-billing for the 6A Intercom because we were charging for a two link system while only providing a single link.

We initiated a request for Plant to make a physical check. The results of this check indicated that the customer did, in fact, have a double link intercom. But more interesting, we found that we were underbilling, not over-billing the customer. However, we unfortunately lost out on this changeover.

The following, while not a case history, serves to further illustrate how some independent communications consultants "push" savings and efficiency by advocating the partial replacement of "public" telephones with "private" systems. This is frequently referred to as the "Two-Track" System.

According to Action Systems Co., a communications consultant firm in Meriden, Connecticut, "the telephone is an insidious little profit snatcher, that is hard to control. Most companies are victimized in at least three different ways: by so called telephone breaks, by excessive personal calls and by unnecessary business calls."

Action insists that telephone costs can be cut and communication efficiency can be improved through the installation of a private telephone system—partly as a supplement to, partly as a replacement for the regular public telephone system.

Raymond O'Durant, Action Systems' vice-president and general sales manager says, "Most of our clients report savings of from 15% to 30% on their telephone bills as a result of using a private system in an intelligent way.

In considering private telephones, Action suggests the following:

A. Study the office layout to learn who uses the telephone often—and for what purposes. It may be that some regular outside phones are superfluous. In addition, it's possible that the talk load is divided between outside and inside calls. In either case, a private phone may cut costs and build efficiency. In making the study, help should be obtained from a local distributor of private telephones or some other communications expert. He can do a fast and effective job.

B. Install a private telephone at those stations where outside calls rarely need to be made. This will reduce monthly extension charges on the regular telephone bill. However, employees will still be able to originate and receive calls within the office.

C. Install private phones alongside regular, outside phones on the desks of employees who must frequently deal with and serve customers. This will ensure that the outside caller is not kept waiting unduly, while the employee makes internal checks. It will also enable employees to hold three or four-way conversations without tying up regular phones.

D. Keep the private telephone system flexible. It should be useful even when an employee is not at his desk. If a paging system is also installed, the person who is called should be able to pick up a private phone wherever he is and respond. In this way the cost of return calls will be eliminated.

E. A communications clinic should be held once exact needs have been established. Telephones are used most economically when they're used correctly.

In short, use of a private telephone system—perhaps coupled with an internal paging system—should help to reduce the regular phone bill and improve communications, too."⁷

CONSULTANT FEES

Fees charged by consultants vary widely. For example, there is the "bracket quotation", which establishes a minimum/maximum range; the "lump sum" or "fixed amount" contract, normally used by government contracts; the "retainer" with the client agreeing to take a certain amount of the consultant's time each year or some other designated time period; and the "contingent" fee which usually involves a payment based upon the benefits of services performed—an arrangement which most professional consultants would have nothing to do with.

Many clients, however, are reluctant to pay a flat fee for auditing their telephone systems, but will accept a contingency fee. On consultant firm, for example, will examine a company's communications system and will present detailed findings and recommendations at no charge. If the customer accepts

⁷ "How to Cut Your Telephone Bill", *Business Management*, Vol. 33, No. 2, November, 1967 pp. 46-49.

the report and acts on proposals, the consultant firm will base its fee on savings actually achieved.

One consultant organization offers a flat fee arrangement for firms needing advice upon moving or expanding, and a retainer plan for continuous analysis of a client's telephone service. Many firms, after originally contracting under a contingency arrangement, sign on a retainer basis.⁸

CONTRACTS

The following serves to illustrate a typical contractual agreement used by private communications consultant organizations:

AGREEMENT

The XYZ Co. Agrees To:

Act as the customer's Communications Department, while conducting this survey in terms of handling all rearrangements, making a study of telephone traffic, issuing instructions to and negotiating with the Telephone Company, all subject to customer's supervision.

Field Check—all items billed for by the telephone companies and to review the equipment actually working, in order to recover money and reduce monthly costs. We will attempt to locate any obsolete, unnecessary or non-functioning equipment and point out any changes that will cause reductions in future telephone bills.

Verify—past and present telephone bills, in order to secure refunds from overcharges, incorrect rate applications and errors.

Engineer—when necessary, any improved or new equipment arrangement which may provide a better grade of service.

The customer will be presented with the study results without any obligation to accept all or any part of such study findings. However, if any of the proposals are acted upon within a 12-month period following our presentation, then payment is due as outlined on the "payment" section of the contract.

XYZ Co.

By -----

Date -----

Customer Agrees to:

Payment to XYZ Company as Follows:

Field Check—To be based on the reduction in fixed monthly costs: Customer agrees to pay an amount equal to savings achieved during six months of service.

Verify—45% of any refunds secured for customer resulting from overcharges, non-functioning obsolete equipment, incorrect rate applications and errors.

Engineering—If XYZ Company redesigns, or designs a new communications system for Customer, upon acceptance by Customer, payment will be a sum equal to 50% monthly service charge increase over a one year period.

Message Units, Toll Calls, Metered Calls

These charges normally vary each month. XYZ Company agrees not to make any claim for payment on this normal variation either up or down. XYZ Company agrees to audit these charges and will attempt to help customer bring these costs down.

Any payment in this area is limited to the average savings resulting from recommendations such as change in type or grade of service to gain more advantageous rate treatment. If accepted by customer, payment to XYZ Company will be 50% of savings computed monthly and be limited to a period of 16 months.

If sums payable to XYZ Company become delinquent, customer agrees to pay reasonable collection costs.

XYZ Company cannot be held responsible for any new expenses voluntarily incurred by the customer.

Customer agrees to allow XYZ Company access to bills and telephone equipment during normal working hours.

Company

By ----- Title -----

Address -----

Date -----

⁸ Business Automation, Op. Cit., p. 39.

M.B.T COMPANY GUIDELINES

The guidelines that follow, concern our relationships with "Independent" Communications Consultants. These guidelines were originally directed to the field in May, 1965, by means of the Sales Supervisory Series, Issue No. 181. While somewhat dated, these guidelines are still in effect.

INDEPENDENT COMMUNICATIONS CONSULTANTS

As is well known, the Company makes available a communications consulting service to any customer desiring it. There is no charge for this service, and the customer is free to accept our advice or not, as he chooses.

Some customers may elect to retain independent consultants or agencies to advise them with respect to their communications needs and requirements. This is their right.

We should make no attempt to dissuade a customer from retaining an independent consultant, nor after a consultant is hired should we attempt to have the consultant service discontinued.

If a customer asks our advice as to whether he should employ an independent consultant, our answer should be that that is a matter for the customer to decide, but we may also inform the customer that we do provide a consultant service directly to our customers. In these circumstances, we would not volunteer information as to the cost of the consultant service but if inquiry is made as to the basis on which the service is supplied, we may inform the customer that it is without obligation on the part of the customer.

If we learn in a particular case that a customer is actively negotiating with an independent consultant, we should not volunteer the availability of our consultant service unless the customer asks us about our consultant service or asks our advice about employing an independent consultant as stated in the preceding paragraph.

The fact that a customer has employed or is actively negotiating with an independent consultant should not interfere with our normal business relations with a customer, including calls or visits by our sales and commercial people as a part of a program of scheduled visits.

When an independent consultant is engaged, we should furnish the consultant with such information as the customer is entitled to obtain, upon the furnishing of appropriate evidence of the consultant's authority. In the event that we believe that the recommendations of the consultant, as to our service offerings, are not in the overall interest of the service requirements of the customer, we may review our recommendations directly with the consultant and the customer. After such review or if we are unable to obtain such a review with the consultant, we may make our recommendations directly to the customer, but this course of action should be taken only after the entire matter has been reviewed with the District level or higher supervision.

CONCLUSION

Based on the foregoing, we have the responsibility to insure that:

1. The customer is accurately billed for all equipment and services provided:
 - Orders are issued correctly.
 - Corrections are properly made.
 - Customer records are kept up to date and properly maintained.
 - Physical checks are implemented when needs dictate.
 2. We effectively follow-up and follow through with respect to customer commitments.
 3. We do an effective job of customer implementation when and where required.
 4. We do a thorough job of fact finding and not a surface job; e.g., not just "skimming the cream" off the top of the market.
 5. The customer recognizes our genuine concern for their communications problems.
 6. We abide by the tenets as set forth in the Bell System's sales policy.
- If these responsibilities are effectively carried out, our customers should have little need for the services of independent communications consultants.

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EXHIBIT 6.—*Memo Re Review of Existing Bell System Practice As a Result of Complaints Received from Interconnect Companies*

FEBRUARY 21, 1973.

Mr. D. K. WENGER.

Mr. P. GRANNIS.

Mr. H. D. WHITE.

Complaints have been received from some Interconnect Companies involving the abandonment of cable and wire on customer premises served by their firms.

As a result of the complaints a review of the existing Bell System Practice, 461-200-917MB was conducted to reaffirm that field instructions were proper in the handling of this subject. Practices were found to be very adequate and complete in coverage. In brief the BSP recognizes the customers rights to their property and accordingly provides for the removal of cable and wire when they so desire.

The following considerations should be weighed when we are confronted with such removals:

1. There is such a thing (or can be) as abandoned cable. One may abandon his ownership of property. The problem is that we have no right to abandon our property on the property of another without his consent, and particularly so if that may impair his use of his own property. The presence of our cable in a customer-owned conduit may, make it impossible for him to use that conduit for his own occupancy.

2. We may remove our cable, if we wish.

3. We may sell it in place if we wish and if the owner or occupant of the premises is willing to buy it.

4. We may "render it useless" and leave it in place if the owner or person in rightful control of the premises does not object; but, as stated above, we have no right to do so if he does object. We might be subject to lawsuits to force us to remove, or to recover damages caused to the owner by our failure to do so.

5. The above comments apply whether or not our discontinuance of service is because of substitution of the equipment of an interconnect company. Obviously, however, customer objection to our "abandonment" of plant in place may be more likely in the interconnect situation.

The Operations Staff recommends that this information be reviewed with all involved supervision so as to create a better understanding of customer rights.

P. H. HINES.

**EXHIBIT 7.—Excerpts From Minutes of A.T.&T. Customer Products Council
Meeting of June 20, 1972**

MINUTES OF CUSTOMER PRODUCTS COUNCIL — JUNE 20, 1972

Attending:

Members

G. Accettura—WECO
J. A. Baird—BTL
R. T. Dugan—AT&T
C. H. Elmendorf—AT&T
R. W. Hendrickson—WECO
M. Tanenbaum—WECO
W. Schiavoni—for
C. R. Williamson—AT&T

Guests

W. R. Bunn—SCBT
S. E. Collis—AT&T
D. Genero—Dreyfuss
R. J. Gibbs—AT&T
R. G. Hochstuhl—AT&T
R. J. Hogan—AT&T
J. H. Hunt—AT&T
R. D. Reuss—IBT

Mr. Dugan welcomed guests to the first CPC Forum type meeting and explained that this agenda differs from regular CPC meetings which deal with specific project team recommendations. Forum meetings include broader subjects on which the Council seeks guidance from Associated Company and other guests.

The following items were discussed :

* * * * *

Customer Switching Project Review

Mr. Schiavoni, AT&T Engineering, presented an overview of PBX/Centrex development since 1969. The success of the 805A in New Jersey Bell was emphasized as were the problems experienced by some of the other Companies who have an excess of competing 756's in stock. The 770's were identified as good movers throughout the System.

He reported, in a general observation, that new PBX installations have been limited partially due to existing tariffing problems and a lack of intensive sales effort. Cases identified as competitive are currently experiencing a one third loss ratio. Mr. Reuss commented that IBT has a "win 'em all" policy.

* * * * *

Other Items

Mr. Hunt recommended that attention be given to a protective device, simple and cheap, an interface between Telco and customer owned equipment, that we can test into without making a premises visit.

The Chairman announced a deferral of the July meeting to August 15, 1972. The meeting will be held at 9:30 AM in BTL Holmdel, New Jersey.

R. J. HOGAN,

Chairman, CPC Coordinating Committee.

EXHIBIT 8.—Memo Re Subscriber Reactions to Bell Systems position on interconnect and competition

PRICES AND SERVICES—SUBSCRIBER REACTIONS TO COPY STATEMENTS (ILLINOIS)

AN OVERVIEW

BACKGROUND

Illinois Bell conducted research recently to help develop an understandable and convincing copy platform for explaining the Bell System's position on competition and interconnection. Several groups of Illinois customers were asked to read and respond to statements outlining our position on the service and pricing aspects of these issues. Admittedly, the research had a limited

purpose and scope. It was not a test of all our alternative arguments to find the one "best" approach. Rather, it was intended only to help sharpen the focus and presentation elements of a selected set of "facts". However, the research is valuable overall in that the statements used represent cornerstone arguments for our position regarding competition and interconnection, and it gives insight into probable responses when they are offered for public consideration. This is an overview of what was learned and suggested by the Illinois research.

GENERAL CONCLUSIONS

The strongest impression one comes away with after reading the research report is a disconcerting confirmation of the immensity and complexity of the task facing Bell System information managers. Ironically, the principal obstacles faced are the strength of our own image today, which we have so carefully cultivated over the years, and some deeply held beliefs about the "American-way-of-life": namely, the inherent benefits of competition or "free enterprise", and that the government will always protect the public interest. Further, the action we protest against (e.g. certification; proposals to open our markets to competition) are seen as reasonable solutions to problems or as ultimately beneficial to the manager.

If the public is to adopt our position fully it must, in some instances, suspend its convictions and accept the antitheses of some long-held beliefs (e.g., that "free enterprise" means higher prices and lower product or service performance; that the government, in the body of the F.C.C., would deliberately take actions harmful to the public interest; or, that modern technology can not overcome the seemingly simple problems presented by interconnection). Thus, in pursuing our objective we stand to alter forever key elements of our image (e.g., that we are not sufficiently innovative or technologically competent to overcome the challenges of competition and interconnection). And, in speaking out as we must to the American public, we may not only contribute to the declining trust in our American institutions—Government and Business—but we may well alter the course of the public consensus not only regarding our industry but other industries as well.

Our public plea must steer carefully away from the jagged edges of public ambivalence toward "Big Business", which we are seen to be. Clearly, the foundation of our defense will prove to be the deep reservoir of goodwill and positive feelings of the public today toward the Telephone Company and the Bell System. The most ready acceptance appears to come when we present ourselves openly—as a big business providing a needed and excellent service which faces certain new problems that need to be resolved in its favor if service is to continue as at present, at its low cost. We falter and are criticized when perceived to be adopting an "unworthy" position—stooping to criticize our competitors or the F.C.C. or proclaiming ourselves to be that which we are not seen to be, the protectors of the public interest.

Because of the diversity of beliefs held by the public regarding "competition", the motives of "Big Business", government regulation and other concepts involved in our case it is unlikely we will find a single line of argument that will be universally applicable. Coupled with the normal lack of interest of the public in corporate communication efforts, and the complexity of some of the concepts we need to present (e.g., the concept and implications of national average pricing) it would be particularly unrealistic in this instance to expect persuasion from a "one time" exposure to limited content mass media presentations, such as a spot commercial.

Public support on the issues of competition and interconnection can not be expected from a general announcement leading to a rush to our side. Neither will it be responsive to the repetition of a single theme. Rather, we face the arduous task of carefully building a mosaic of acceptance of varying elements of our case by various segments of the public. This will require the intelligent exploitation of every avenue of communication available to us, the careful targeting of specific points in unique approaches and all part of an overall and systematic development of our case before the public.

The Illinois research argues strongly for a cautious approach to public communications, fully examining their potential impact on the audiences involved in advance less we reinforce undesired beliefs or irritate rather than persuade. And, it confirms the need to identify target audiences not only for their potential influence but also in terms of their specific belief structures.

SOME DETAILS AND FURTHER DIRECTIONS SUGGESTED BY THE ILLINOIS RESEARCH

Compounding the problem of long-held beliefs regarding government, competition and the Telephone Company are the varying degrees of familiarity of the public with the full nature of the nationwide telephone system and the F.C.C., its role and responsibilities.

The Telephone Company is best known to the public and surrounded by the most extensive set of beliefs, if not the most firm. The Illinois study confirms in part what other studies have repeatedly shown: that the Telephone Company tends to be personalized by its customers and viewed in relatively simple terms.

The Telephone Company for most is the people who bring telephones into their homes, who make it work properly and who send a bill once a month. Most customers have had a generally positive experience with the Telephone Company—it nearly always works well and the cost is reasonable and, comparatively, a good value. Telephone people are friendly and seemingly concerned about customers and their problems; and, the generally attractive and dependable equipment in their home and where they visit (and what they know or have heard about Bell Labs) makes them feel the Telephone Company is a dynamic, innovative company that uses and depends on research and technology to grow.

The Illinois copy statements emphasized the existence of a vast, complex, nationwide communications system operating as a single machine. It pointed out the advantage of this—in avoiding duplication of facilities and thus permitting shared costs and national average pricings; and, that it provides the excellent service customers get now, providing billions of connections to every customer, and the damaging effect on this by the connection of foreign equipment.

While the Telephone Company is "big" in a general sense, most consider their company "local", maybe statewide or regional at most. There is a general sense of being connected to other companies in a telephone system that some can identify as the "Bell System" but most refer to simply as "Bell Telephone".

It startles some customers to learn their telephone is part of a "single machine" or a "nationwide telephone system". It requires some effort to think of their telephone as a control instrument that can order this vast, complex machine to do their bidding, or to speak to anyone in the world.

It is also a quantum leap conceptually to ask many customers to think of their telephone service costs not in terms of a "local service charge" and "toll charges" for calling friends and relatives, as they are used to thinking, but in terms of prices reflecting the contribution of business subsidies, based on average pricings and so forth as offered in the Illinois copy statements.

The service argument is especially difficult for customers to comprehend. The argument advanced in the Illinois test centered around the "sensitivity" of the telephone system, to interruption by non-Bell equipment, and the unique quality of our equipment and skills of our people to maintain the system.

The argument that we now provide the best telephone service in the world, while not disputed particularly, and the strong descriptive terms we use to describe the system do not reconcile in the public's mind with the threat that a single signal somewhere that is faulty could disrupt service. It seems illogical and their experience is the telephone system works under the most trying circumstances (e.g. in terrible floods, hurricanes, etc.). Among the basic belief system of most Americans is a trust and faith in modern technology. Thus, it is incredible that only the Telephone Company can develop, build and maintain suitable telephone instruments. Besides, they feel, if non-Bell equipment is less than satisfactory interface arrangements and especially certification (where it is at least generally understood) seems a logical and reasonable solution.

The F.C.C. is a less well known entity, confirmed by the Illinois research. The essential finding is that, whether respondents brought information into the group or obtained it there, where there is a basic understanding the F.C.C. is a governmental agency ingrained beliefs about "the government" take control. The essential conviction is that, current events to the contrary, government exists to protect the public interest.

Essentially, even with some discussion, it is difficult for most to believe a governmental agency would do anything that would intentionally be against

the public interest. Our informing them of this only irritates. Key to this is an inability to examine "both sides". While this suggests the possibility of a "we say", "they say" approach the possible consequences of such a tack, either in the public's judgment of which side is "right" or in the Commission's interpretation of our action weigh against it, especially in view of the starting point of trust in government of the public.

The research strongly suggests a direct, frontal attack on the F.C.C.'s deliberations could be counter productive. Therefore, it might be more feasible and useful in some instances to draw upon the trust the public has in government protecting the interests of the public as well as our interests and speak of the commission as a neutral body now considering proposals by our competitors, and our concern that the public and the F.C.C. understand and support our petition.

Competition and the belief system surrounding it and the "Face enterprise system" is the fulcrum on which our case and that proposed by the F.C.C. teeters. The knee-jerk reaction of most of the public is that "competition" among companies providing products or services is inherently and always "good"—resulting in the lowest prices and highest quality and choice in the marketplace. There is recognition that the Telephone Company is regulated in ways unlike other businesses but most see this not a problem. In fact, the very success and performance we pride, including the low cost of telephone service, "proves" regulation doesn't hurt us.

However, most do not see the Telephone Company as especially a unique business. It is a "big business" like the "other companies" with which the Telephone Company will be asked to compete.

In the American way of things this is only "fair" that the Telephone Company (the Bell System here) compete with other telephone companies.

Our basic argument asks the public to accept the antithesis of what they have been enculturated to believe—that competition will result not in least prices but highest prices, not in higher quality but lesser quality and that "choice" is good for them.

The Illinois research finds customers prefer to believe the opposite—that in the long run competition in telephone matters will further improve service and costs and, in addition, will help to keep the Telephone Company "on its toes".

The lack of concern of the consequences to the Telephone Company rests on two convictions: that the Telephone Company (the Bell System; which is vast and nationwide and has a record of performance, which we confirm to them) will be able to "take care of itself"; and, that the Telephone Company provides two distinct kinds of service, one to homes and one to businesses (i.e., "big businesses").

The ability of the Bell System to take care of itself is, again, a belief that is the consequence of our past image efforts and implicit in some of the arguments we use to support our case for the need for a unified system. We thus face, as in other instances, "tradeoffs" that must be carefully considered.

The differentiation in the mind of the public between residential service and business services leads to considerable ambivalence regarding competition and shared costs. While there is a general feeling that "Business" should help subsidize telephone service (as it is usually expected to subsidize most things the public wants) it is really difficult for most to comprehend how actions affecting business customers affect them. Coupled with a tendency to see specialized common carriers as "other telephone companies" the problem evolves in most people's minds as essentially a problem among businesses: the Telephone Company (a "big business", other telephone companies, and business customers (i.e. "big business customers"). As such, the emotional involvement in the problem suggests about as much concern as we might have for a Balkan War. In fact, throughout the Illinois research there is a strong undercurrent of "we" and "they" running through this issue.

The one point that seems to register well with most is the concept of "skimming". Most can understand and appreciate the Company's resistance. Most feel the Company, as the developer of the telephone system and its principal guardian has a right to protect itself from infringement—but that that right does not extend to preventing all competition.

Those findings suggest that while a direct attack against the FCC and argument against "competition" would not easily succeed opportunities exist for:

Emphasizing the "unfair" aspects of the "skimming" nature of the specialized common carrier proposals.

Underscoring our "guardian" role and intent only to protect that which is our franchise.

The lack of "fairness" in the true sense of the competition our competitors suggest.

EXHIBIT 9.—*Michigan Bell Telephone Co. Memo Re "How Can We Increase Our Wins'?"*

AUGUST 1, 1972.

Mr. BALESKY; Mr. BARTZ; Mr. BULTHUIS; Mr. ELLIOTT; Mr. GIETZEN; Mr. HARKIRK; Mr. HARRIS; Mr. THOMPSON; Mr. FITZPATRICK; Mr. STETSON:

During our meeting of July 18, 1972, we addressed ourselves to the problem "How can we increase our 'wins'?" Following is a summary of the discussion emanating from the critical areas we explored:

IMPROVING MARKET COVERAGE (COVERING MORE OF THE MARKET MORE EFFECTIVELY)
Present Status of Market Coverage

Limited programs are being carried out in the BX areas on a scheduled basis with our most vulnerable markets (756's, Manual PBX, Call Directors). Manpower constraints prohibit adequate coverage of Key and Call Director markets. Concern was expressed for our ability to hold onto these accounts without some "breakthrough" on available force.

Phone-Power type contacts and Expanded Market Strategy programs are being utilized when time and force permit.

Traffic's cooperation on studies and their customer evaluation referral procedure provide significant assistance in implementing coverage.

Busy studies in some areas are running 5-10 weeks.

Deterioration in maintenance and repair services is still a serious deterrent to required follow-through on customer servicing.

Needs To Be Met

Evaluation of Marketing and Commercial job responsibilities and organizational structure for more effective use of force and abilities. Job descriptions tend to limit the maximizing of productivity; e.g. Salesmen are performing some tasks which should be delegated. Clerical forces, although fully qualified and capable, are restricted from handling those types of work.

Tie-in of Traffic Business Service studies and a Plant physical check program with a Marketing coverage plan.

Guidelines for determining contact procedures—when, where, and how to best use advertising, mail, brochures, phone, follow-up activity.

Distribution and review of the Dodge Reports needs examination.

Evaluate the Architects and Builders group printouts for new building and expansion. Southfield is currently using this as a valuable source for lead time in meeting competitive situations as well as normal customer demands.

Notification to the Field of use of Traffic's TMS machine for identification of problems. (Types of studies which can be made should be ascertained).

A firm Company commitment to support competitive efforts. "Do we want to compete for the market? Or, do we want to get out of the business? If the former, take a firm stance and provide us with the necessary tools to compete. Current lack of direction is demoralizing and confusing to craft and contact people." (Group feels that this contributes to force losses, etc.).

SELLING MORE EFFECTIVELY

New Resources Available

Intermediate training in PBX.

New System PBX reference manuals will be placed in each crew by August, 1972.

New economic analyses (Discounted Cash Flow) should be made available by the end of August. Training will be developed for the Field on interpretation of these programs and Staff will coordinate in providing an authoritative person to consult with on any problems which arise.

Needs To Be Met

Modular training segments on equipment and products made available on an ongoing basis.

Scattered and incomplete information on equipment brought together for reference source.

Comprehensive competitive equipment binder supplied.

Offer competition seminars for exchange of ideas and update on competitor strategies.

Provide a resource center (i.e. expansion of competitive coordination concept)—a team of experts rather than trying to make each salesman an expert, for pursuing and supplying definitive and accurate information on equipment, economic analyses, sales strategies, tax matters, etc.

Provide interconnection specialists to follow through on lost cases, implementing interface devices, directory changes, etc.

FILL IN PRODUCT VOIDS

Immediate needs are seen in:

All calls transfer (all PBX's and Centrex).

Expanded Main/Satellite service or released loop for Centrex customers with multiple locations.

Centrex unbundling on PET application. (Have filed).

Alleviating restrictive thinking on capabilities and alternatives of Centrex concepts; i.e. PBX-C.O. Competitive switchers coming from Litcom, Wescom, and Northern Electric dictate moving out rapidly on expanded Centrex offerings.

Key system features:

More flexibility.

Greater ICL capacity.

Paging.

Automatic button restoral.

D.S.S.

Spokesman housing a busy lamp field.

10-button wall set.

Increased station user identification (ala Bechtel case).

Add-on conference equipment with C.O. lines.

Capability of competing with Nitsuko and Meisei lines.

Special industry voids

Hospital market—we have nothing to meet needs for medical and non-medical emergency paging; Dr. registry, picturephone and CRT devices. With HEW pressuring for efficiency and growing consolidation of hospitals, our competitors will supply the needed sophisticated communications services.

Hotel/Motel—Key pulsing for attendant console; code restriction; and lobby paging.

PRICING MORE COMPETITIVELY

Immediate needs are seen in:

Updating our rate making policies to get rates in line with costs.

Focusing initially on Hotel/Motel rates for specialized requirements—we are extremely vulnerable in this market.

Illustratively,

Competitive systems generally have a form of toll diverting within the switcher. The additional charge, if any, for this option is usually quite nominal. MBT presently charges \$83.75 per month for toll diversion even if the serving vehicle (i.e. 770 PBX) is capable of providing this feature at limited or no cost.

Presently MBT charges \$.30 per month per station for corresponding room and station numbers while our competitors provide this at no additional charge.

OFFER PAYMENT FLEXIBILITY

We need fast action on optional payment arrangements, such as:

Pacific Northwest Bell's incremental discount plan based on location life of Dial PBX systems.

Improved flexibility on short run contracts for new (easily installed) equipment; i.e. customer who plans to move in less than five years and is willing to pay move charges—not both termination and move charges.

Advanced payment and maintenance payment option plans.

GENERAL CONSIDERATIONS

A need exists to keep employees informed of competition and to stimulate interest and commitment.

Staff need for more competitive information from the Field by way of proposals, brochures, contracts, etc.

A need for concerted effort dedicated to save the Hotel/Motel market—some charges are out of line and features are lacking.

"A need for quick action, not promises for 1975 which may materialize but too late." (Several references were made by the group relating to this point).

These were the most relevant points in which we felt you all shared an interest. If there are others which we missed, please let me know so that they can be included in our list.

It is recognized that many of the problems we explored in our November, 1971 meeting remain unresolved and are of even greater urgency today if we hope to attain a favorable competitive position before we experience the total loss of some markets.

Given your expressions of concern, we will continue to work towards expeditious answers to our most compelling needs.

EXHIBIT 10.—*Letter From Y Center of Battle Creek (Mich.) Re Payment of Pledge by Michigan Bell*

[From Grand Rapids Press, July 18, 1974]

BELL SHOULDN'T BE MALIGNED

EDITOR: Regarding Mr. Robert Lewis' item "Local Supplier Charges Strong-Arming by Bell" printed in your Wednesday, June 26 Grand Rapids Press, I would like to take issue with Mr. Ronald B. Fox and tell you what the facts are.

As president of the Y Center of Battle Creek I have had contact with both the T.P.I. representative, Tom Rinehart, (Kalamazoo) and with Mr. Val Bleech, local manager of Michigan Bell.

After we made our decision to go with T.P.I., Mr. Bleech called to express disappointment, feeling that we had not given Bell an opportunity to supply us with figures and to learn that we had indeed signed with T.P.I.

We had in fact, checked to make sure that T.P.I.'s estimates and projections were fair and accurate and had talked with a Bell representative by phone. I can understand that Mr. Bleech was disappointed inasmuch as he had worked diligently and effectively on our Pattern Gifts Committee and had encouraged Michigan Bell to pledge \$10,000 to our Capital funds drive.

At no time did Michigan Bell nor Mr. Bleech request that their contribution be returned nor refuse to pay as pledged. In fact, pledged amounts were paid on time and in 1974 paid ahead of time. The \$10,000 pledge has been paid in full.

In my conversation with Mr. Bleech, however, and in the face of our decision to buy from T.P.I., the statement was made that it could possibly place the balance of the pledge by Bell in jeopardy. This was not considered a threat we had already committed ourselves to T.P.I. and it was merely a personal conjecture by Mr. Bleech at the time. My reply was that if it happened we would just have to live with it.

Sen. Philip Hart was certainly in order when he questioned Mr. Fox concerning Michigan Bell in this case.

Michigan Bell has done everything we have asked them to do as well as what they voluntarily pledged to do for our Building Fund. We appreciate their service and pay from \$100 to \$150 per month to Michigan Bell for our five lines and long distance calls.

We are also happy with our relationship with T.P.I. but believe Mr. Fox testified naming our case without knowing the facts.

To me, Mr. Fox and the press have severely maligned Michigan Bell, a fine utility that has often bent over backwards to provide customer service. It may be that independent phone sales are cutting into rental revenue and some resistance is demonstrated in other cases but in our case certainly not to the degree which I read into your article.

HAROLD W. SUNDBERG,
President,
Y Center of Battle Creek.

Exhibit 11.—*A.T. & T. Listing of Officers and Directors of Associated Companies of the Bell System*

AMERICAN TELEPHONE & TELEGRAPH CO.,
Washington, D.C., September 19, 1974.

The Hon. PHILIP A. HART

*Chairman, Subcommittee on Antitrust and Monopoly, Committee on the Judiciary,
Room 253, Russell Senate Office Building, Washington, D.C.*

Dear Senator HART:

During the course of the hearings on S. 1167 pertaining to communications by the Subcommittee on Antitrust and Monopoly, Mr. Hellerman caused to be placed in the record a document listing the Officers and Directors of American Telephone and Telegraph Company and the Associated Companies of the Bell System. The document also listed the Officers' and Directors' affiliations.

Attached hereto find a copy which corrects the errors on the document that was placed in the record as of September 18, 1974. I would appreciate your substituting it for the one that was placed in the record.

The list contains only business affiliations. It does not include affiliations with church, school, civic, and non-profit organizations.

Very truly yours,

DOUGLAS B. McFADDEN,
Executive Assistant and Attorney.

Officer or director: Title	Other corporate affiliations	Position
AMERICAN TELEPHONE & TELEGRAPH CO.		
Baird, Jack A.: Officer.....	Bell Telephone Laboratories, Inc.....	Director.
Batten, William: Director.....	J. C. Penney Co., Inc.....	Chairman of the board and chief executive officer.
	Boeing Co.....	Director.
	First National City Corp.....	Do.
	First National City Bank.....	Do.
	New York Stock Exchange, Inc.....	Do.
Billingsley, James R.: Officer.....		
Bolger, Thomas E.: Officer.....	Riggs National Bank of Washington, D.C.....	Do.
	Garfinckel, Brooks Bros., Miller & Rhoads, Inc.....	Do.
	Government Employees Insurance Co.....	Do.
	Criterion Insurance Co.....	Do.
Brace, Lloyd D.: Director.....	First National Bank of Boston.....	Do.
	USM Corp.....	Do.
	First National Boston Corp.....	Honorary director.
Brown, Charles L., Jr.: Officer.....	Inland Steel Co.....	Director.
	GATX (General American Transportation Corp.).....	Do.
	Hart Schaffner & Marx.....	Do.
	Marcor, Inc.....	Do.
	Chemical New York Corp.....	Do.
	Chemical Bank.....	Do.
Carter, Edward W.: Director.....	Carter Hawley Hale Stores, Inc.....	Chairman of the board.
	Del Monte Corp.....	Director.
	Pacific Mutual Life Insurance Co.....	Do.
	Southern California Edison Co.....	Do.
	Western Bancorporation.....	Do.
	United California Bank.....	Do.
Clarke, H. Weston, Jr.: Officer.....	New Jersey Bell Telephone Co.....	Do.
Cleary, Catherine B.: Director.....	First Wisconsin Trust Co.....	President and director.
	First Wisconsin Bankshares Corp.....	Director.
	General Motors Corp.....	Do.
	Kraftco Corp.....	Do.
	Northwestern Mutual Life Insurance Co.....	Trustee and member execu- tive committee.
Cook, George V.: Officer.....	Wisconsin Telephone Co.....	Director.
Crosland, Edward B.: Officer.....	Federal Home Loan Bank of New York.....	Do.
	South Central Bell Telephone Co.....	Do.
	Chesapeake & Potomac Telephone Co. of Virginia.....	Do.
	American Security & Trust Co.....	Do.
Davis, Archie K.: Director.....	Wachovia Bank & Trust Co., N.A.....	Do.
	Chatham Manufacturing Co.....	Do.
	Jordan Spinning Co.....	Do.
	Media General, Inc.....	Do.
	Sellers Manufacturing Co.....	Do.
	Southern Railway System.....	Do.
	Royal Cotton Mills.....	Do.
	Wachovia Corp.....	Do.

Officer or director: Title	Other corporate affiliations	Position
deButts, John D.: Chairman of board and director.	First National City Corp. First National City Bank..... Kraftco Corp. United States Steel Corp. Northwestern Bell Telephone Co.	Director. Do. Do. Do. Do.
Flint, Robert N.: Officer.....	Sun Chemical Co.	Do.
Fox, John George: Officer.....	Chesapeake & Potomac Telephone Co.	Do.
Garlinghouse, F. Mark: Officer.....	Ohio Bell Telephone Co. Michigan Bell Telephone Co.	Do. Do.
Greber, Edward G.: Officer.....	Ropes & Gray.....	Partner.
Hanify, Edward B.: Director.....	State Street Bank & Trust Co. John Hancock Mutual Life Insurance Co. Boston Edison Co.	Director. Do. Do.
Hewitt, William A.: Director.....	Deere & Co.	Chairman and chief executive officer.
	Continental Illinois Corp. Continental Illinois National Bank & Trust Co., Chicago.....	Director. Do.
Holland, Jerome H.: Director.....	Continental Oil Co. Chrysler Corp. Continental Corp. Continental Insurance Co. Federated Department Stores..... General Cigar Co. General Foods Corp. Manufacturers Hanover Corp. Manufacturers Hanover Trust Co. Union Carbide Corp. New York Stock Exchange, Inc.	Do. Do. Do. Do. Do. Do. Do. Do. Do. Do. Do. Public director.
Hough, Richard R.: Officer.....	Zurn Industries, Inc. American Can Co. Allegheny Corp. American Telephone & Telegraph-Long Lines.....	Director. Do. Do. President.
Hutson, Frank A., Jr.: Officer.....		
Johnson, Belton K.: Director.....	Chaparrrosa Ranch..... King Ranch, Inc. First City National Bank of Houston..... National Bank of Commerce (San Antonio)..... National Finance Credit Corp. United States Trust Co. of New York..... Chaparrrosa Agri-Service, Inc.	Owner. Director. Do. Do. Do. Do. Do.
Kertz, Hubert L.: Officer.....	Illinois Bell Telephone Co. Indiana Bell Telephone Co.	Founder and chairman. Director.
Killian, James R., Jr: Director.....	Massachusetts Institute of Technology Corp. Cabot Corp. General Motors Corp. Ingersoll-Rand Co. Polaroid Corp. Mitre Corp.	Honorary chairman. Director. Do. Do. Do. Do.
Lilley, Robert D.: President and director.....	R. H. Macy & Co., Inc. Fidelity Union Bancorporation..... Chase Manhattan Corp. Chase Manhattan Bank, N.A. Continental Corp. Mutual Benefit Life Insurance Co. Bell Telephone Laboratories, Inc. Pacific Telephone & Telegraph Co. Pacific Northwest Bell Telephone Co.	Do. Do. Do. Do. Do. Do. Do. Do. Do.
Lindholm, William L.: Vice chairman and director.	Acacia Mutual Life Ins. Co. Manufacturers Hanover Corp. Manufacturers Hanover Trust Co. Bell Telephone Laboratories, Inc. New York Telephone Co. Southern Bell Telephone Co.	Do. Do. Do. Do. Do. Do.
Lund, Paul M.: Officer.....	Bell Telephone Co. of Pennsylvania.....	Do.
MacNaughton, Donald S.: Director.....	Exxon Corp. Prudential Insurance Co. of America.....	Do. Chairman of the board and chief executive officer.
McGill, William J.: Director.....	Columbia University..... McGraw-Hill, Inc. Texaco, Inc.	President. Director. Do.
Miller, J. Irwin: Director.....	Cummins Engine Co., Inc. Irwin Union Bank & Trust Co. of Columbus.....	Chairman of the board. Do.
Mobraaten, William L.: Officer.....	Chesapeake & Potomac Telephone Co. of West Virginia.....	Director.
Mulheran, John R.: Officer.....	Allegheny Airlines, Inc. American Republic Insurance Co. Central Savings Bank.....	Do. Director and incorporator. Trustee and Member executive committee.
Murphy, William B.: Director.....	Campbell Soup Co. Merck & Co., Inc. International Paper Co.	Director. Do. Do.

Officer or director: Title	Other corporate affiliations	Position
Owens, Cornelius W.: Officer.....	New England Telephone and Telegraph.....	Director.
	Southwestern Bell Telephone Co.....	Do.
	Marine Midland Banks, Inc.....	Do.
	W. R. Grace & Co.....	Do.
	St. Vincent's Hospital & Medical Center of New York.....	Director, vice president and chairman-executive committee.
Patton, Thomas F.: Director.....	New York Stock Exchange.....	Director.
	Republic Steel Corp.....	Do.
	Cleveland-Cliffs Iron Co.....	Do.
	Liberia Mining Co., Ltd.....	Do.
	Trustee in reorganization of the Erie-Lackawanna R.R. Co.	
Reed, Rex R.: Officer.....		Do.
von Auw, Alvin: Officer.....	The Chesapeake & Potomac Telephone Co. of Maryland.....	Do.
	Southern New England Telephone Co.....	Do.
Warner, Rawleigh, Jr.: Director.....	Mobil Oil Corp.....	Chairman of the board and chief executive officer.
	American Express Co.....	Director.
	American Express International Banking Co.....	Do.
	Caterpillar Tractor Co.....	Do.
	Chemical New York Corp.....	Do.
	Chemical Bank.....	Do.
	Time, Inc.....	Do.
Whalen, Kenneth J.: Officer.....	Mountain States Telephone & Telegraph Co.....	Do.
	Burroughs Corp.....	Do.
	American Motors Corp.....	Do.
A. T. & T. CO.—LONG LINES DEPT.		
Barclay, James C.: Officer.....		
Beck, Robert E.: Officer.....		
Clarke, H. Weston, Jr.: Officer.....	New Jersey Bell Telephone Co.....	Do.
Crabb, Ernest H.: Officer.....		
Deyo, C. Russell: Officer.....		
Eastmond, Leon E.: Officer.....		
Garlinghouse, F. Mark: Director.....	American Telephone & Telegraph Co.....	Vice president and general counsel.
	C. & P. Telephone Co.....	Director.
	L. F. Garlinghouse Co.....	Chairman-board.
	M C Industries, Inc.....	Director.
	New England Telephone Co.....	Counsel.
	Ohio Bell Telephone Co.....	Director.
	Polo Plastics Inc.....	Do.
	Sun Chemical Co.....	Do.
Gaynor, Robert H.: Officer.....		
Gradle, Robert E.: Officer.....		
Hough, Richard R.: Director and officer.....	Allegheny Corp.....	Do.
	American Can Co.....	Do.
	American Telephone & Telegraph.....	Vice president.
Huber, Robert E.: Officer.....		
Huse, Sylvester: Officer.....		
Kelley, Walter B.: Director and officer.....		
Kertz, Hubert L.: Director.....	American Telephone & Telegraph Co.....	Do.
	Illinois Bell Telephone Co.....	Director.
	Indiana Bell Telephone Co.....	Do.
	Acacia Mutual Life Ins. Co.....	Do.
Lindholm, William L.: Director.....	American Telephone & Telegraph Co.....	Director and vice chairman.
	Bell Telephone Laboratories.....	Director.
	Manufacturers Hanover Corp.....	Do.
	New York Telephone Co.....	Do.
	Southern Bell Telephone & Telegraph Co.....	Do.
	Manufacturers Hanover Trust Co.....	Do.
Levy, Harold S.: Officer.....		
Myers, Joseph A.: Officer.....		
Nichols, Richard B.: Officer.....		
Oliver, Billy B.: Officer.....		
Owens, Cornelius W.: Director.....	American Telephone & Telegraph.....	Executive vice president.
	Grace W. R. & Co.....	Director.
	Marine Midland Banks Inc.....	Do.
	N.Y. Stock Exchange.....	Do.
	New England Telephone & Telegraph Co.....	Do.
	Southwestern Bell Telephone Co.....	Do.
	St. Vincents Hospital and Medical Center.....	Officer.
Sageman, Robert E.: Officer.....		
Stark, Alexander C., Jr.: Officer.....		
Stecker, Robert B.: Officer.....		
Watson, Roy D.: Officer.....		
Willcoxon, Sam R.: Officer.....		
BELL TELEPHONE CO. OF NEVADA		
Cassidy, Adrian C.: Director.....	KQED (educational television).....	Vice president and director.
Godfrey, Samuel A.: Director.....		
Hough, Gordon Letts: Director.....	Ameron Inc. (Pipe & Construction Co.).....	Director.
	Pacific American Income Shares Inc.....	Do.
	United California Bank.....	Do.

Officer or director: Title	Other corporate affiliations	Position
Hull, Jerome W.: Director and president	Crocker National Bank	Director and member executive committee.
	Crocker National Corp.	Do.
	DiGiorgio Corp. (Fruit)	Director.
	N.Y. Life Insurance Co.	Director and member executive committee.
	Caldwell Banker & Co.	Director.
	Pacific Southwest Airlines (PSA)	Do.
Pollard, Dean R.: Director		
Woods, William: Director		
Edwards, Tom G.: Officer		
BELL TELEPHONE CO. OF PENNSYLVANIA		
Barnhorst, Lawrence J.: Officer	Blue Cross of Western Pennsylvania	Do.
	Regional Industrial Development	Co-director.
	United Fund of Allegheny City	Director.
	Equibank	Do.
Boehn, Kenneth E.: Officer	Diamond State Telephone Co.	Officer.
Bond, Richard C.: Director	Insurance Co. of North America	Director.
	INA Corp.	Do.
	SCM Corp.	Do.
	John Wanamaker Inc.	President of board of trustees.
	Kraftco Corp. (dairy products)	Director.
	Lenox Inc.	Do.
	Rorer Amchem Inc.	Do.
	Smith Corona Corp.	Do.
Cashel, William S., Jr.: Director and president	Diamond State Telephone Co.	Director and officer.
	Penn Mutual Life Insurance Co.	Trustee.
	First Pennsylvania Banking & Trust Co.	Director.
	Rorer Amchem Inc.	Do.
	Philadelphia Saving Fund Society	Trustee.
Dunning, Harrison F.: Director	Nabisco Inc.	Director.
Froehlich, Harvey: Officer		
Hanley, Edward J.: Director	Allegheny Ludlum Industries, Inc.	Chairman — finance committee.
	American Standard Inc.	Director.
	Duquesne Light Co.	Do.
	Mine Safety Appliances Co.	Do.
	National Lead (NL Industries)	Do.
King, John Bedford: Officer	Diamond State Telephone Co.	Officer.
Kline, Sidney D.: Director	American Bank & Trust Co. of Pennsylvania	Chairman of the board.
	American Casualty Co., Reading	Director.
	Berks Title Insurance Co.	Chairman of the board.
	Provident Federal Savings & Loan	Director.
	Reading Hospital	Do.
	Valley Forge Insurance Co.	Do.
	Valley Forge Life Insurance Co.	Do.
	Colonial Berks Real Estate Co.	Do.
	Frankhouser Associates, Inc.	Do.
Lund, Paul M.: Director	American Telephone & Telegraph	Officer.
Mathers, William P.: Director and officer	Diamond State Telephone Co.	Director and officer.
Morrison, George L., Jr.: Director	Glen-Gery Corp.	Director.
	UGI Corp. (gas improvement)	Do.
	Commonwealth National Bank	President and CED.
	American Sentinel Insurance Co.	Director.
	Commonwealth Communications Services, Inc.	Do.
Potts, Frederic A.: Director	Crane Co.	Do.
	Drexel Bond Debenture Trading Fund	Do.
	Drexel Utility Shares Inc.	Do.
	Kittaning Coal Co.	Director and officer.
	Penn Mutual Life Insurance Co.	Trustee.
	Philadelphia Port Corp.	Chairman of the board.
	Philadelphia National Bank	Director.
	PNB Corp.	Do.
	Western Saving Fund Society of Philadelphia	Board of managers.
Robinson, Ian W.: Officer	Diamond State Telephone Co.	Director and officer.
Shaughnessy, Robert L.: Officer	do.	Officer.
Tyson, Charles R.: Director	CPC International, Inc.	Director.
	ESB Inc. (electric storage battery)	Do.
	First Pennsylvania Banking & Trust Co.	Do.
	First Pennsylvania Corp.	Do.
	Mutual Assurance Co.	Trustee.
	Otis Elevator Co.	Director.
	Budd Co.	Do.
	Penn Mutual Life Insurance Co.	Chairman of the board of trustees.
	Stock Insurance Co. of the Green Tree	Trustee.
	Western Savings Fund Society of Philadelphia	Board manager.
Zimmerman, Irvin G.: Officer	Diamond State Telephone Co.	Officer.
	Central Penn National Bank	Director.

Officer or director: Title	Other corporate affiliations	Position
Gilliand, Merle E.: Director	Pittsburgh National Bank Federal Reserve Bank of Cleveland, Pittsburgh branch. Pittsburgh National Corp. Kissell Co.	Chairman—CED. Director. Do. Do.
Harrison, Robert Drew: Director	John Wanamaker of Philadelphia Provident National Bank Philadelphia Electric Co. Fidelity Mutual Life Insurance Co. Philadelphia Mutual Assurance Co. Philadelphia Saving Fund Society	President and CED. Director. Do. Do. Do. Trustee.
Wachman, Marvin: Director	Temple University Philadelphia Saving Fund Society	President. Trustee.
Scully, Raymond F.: Officer		
Scott, Winfield: Officer		
BELL TELEPHONE LABORATORIES		
Baird, Jack A.: Director	American Telephone	Vice president.
Baker, W. O.: Director and officer	Babcock & Wilcox Corp. Summit and Elizabeth Trust Co.	Director. Do.
Hannay, N. Bruce: Officer		
Lilley, Robert D.: Director	American Telephone & Telegraph R. H. Macy & Co., Inc. Fidelity Union Bancorporation Chase Manhattan Corp. Chase Manhattan Bank, N.A. Continental Corp. Mutual Benefit Life Ins. Co. Pacific Telephone & Telegraph Co. Pacific Northwest Bell Telephone Co.	President and director. Director. Do. Do. Do. Do. Do. Do. Do.
Lindholm, William L.: Director	American Telephone & Telegraph Acacia Mutual Life Insurance Co. Manufacturers Hanover Corp. Manufacturers Hanover Trust Co. New York Telephone Co. Southern Bell Telephone Co.	Vice chairman and director. Director. Do. Do. Do. Do.
McKay, K. G.: Director and officer	Keuffel & Esser Co. Sandia Corp.	Do. Do.
Procknow, Donald E.: Director	Teletype Corp. Sandia Corp. J. P. Morgan & Co., Inc. Morgan Guaranty Trust Co. National Merit Scholarship Corp. CPC International, Inc. Ingersoll-Rand Co. Prudential Insurance Co. of America Western Electric Co.	Do. Do. Do. Do. Do. Do. Do. Do. Director and president.
Thomas, D. W.: Director and officer	Sandia Corp.	Director.
West, Joseph T.: Director	Teletype Corp. Sandia Corp. Western Electric Co.	Do. Do. Director and executive vice president.
Zweier, Paul: Director and officer		
C. & P. TELEPHONE COS.—OFFICERS		
Anderson, Howard C.	C. & P. Telephone Co. C. & P. Telephone Co. of Maryland C. & P. Telephone Co. of Virginia C. & P. Telephone Co. of West Virginia	Officer. Do. Do. Do.
Boykin, J. Wesley	C. & P. Telephone Co. C. & P. Telephone Co. of Maryland C. & P. Telephone Co. of Virginia C. & P. Telephone Co. of West Virginia	Do. Do. Do. Do.
Butta, J. Henry	C. & P. Telephone Co. C. & P. Telephone Co. of Maryland C. & P. Telephone Co. of Virginia C. & P. Telephone Co. of West Virginia	Do. Do. Do. Do.
Dyer, Lloyd E.	C. & P. Telephone Co. C. & P. Telephone Co. of Maryland C. & P. Telephone Co. of Virginia C. & P. Telephone Co. of West Virginia	Do. Do. Do. Do.
Morgan, Carroll E.	C. & P. Telephone Co. C. & P. Telephone Co. of Maryland C. & P. Telephone Co. of Virginia C. & P. Telephone Co. of West Virginia	Do. Do. Do. Do.
Snyder, Richard B.	C. & P. Telephone Co. C. & P. Telephone Co. of Maryland C. & P. Telephone Co. of Virginia C. & P. Telephone Co. of West Virginia	Do. Do. Do. Do.
Tupper, Robert R.	C. & P. Telephone Co. C. & P. Telephone Co. of Maryland C. & P. Telephone Co. of Virginia C. & P. Telephone Co. of West Virginia	Do. Do. Do. Do.

Officer or director: Title	Other corporate affiliations	Position
Woods, Fielding K.	C. & P. Telephone Co.	Officer.
	C. & P. Telephone Co. of Maryland	Do.
	C. & P. Telephone Co. of Virginia	Do.
	C. & P. Telephone Co. of West Virginia	Do.
Zahn, J. Hillman	C. & P. Telephone Co.	Do.
	C. & P. Telephone Co. of Maryland	Do.
	C. & P. Telephone Co. of Virginia	Do.
	C. & P. Telephone Co. of West Virginia	Do.
	Equitable Life Insurance	Director.
	WETA	Do.
	Medical Services	Do.
	Wolf Trap Associates	Do.
C & P TELEPHONE CO.		
Bonsack, Samuel E.: Director and president	C & P Telephone Co. of Maryland	Director and president.
	C & P Telephone Co. of Virginia	Do.
	C & P Telephone Co. of West Virginia	Do.
	Beekman Downtown Hospital (New York City)	Director.
Danzansky, Joseph B.: Director	Giant Food, Inc.	President.
	Pepsi Cola Bottling Co.—Washington, D.C.	Director.
	National Bank of Washington	Do.
	Potomac Electric Power Co.	Do.
	Perpetual Building Association	Do.
Dennard, Dr. Cleveland L.: Director	Washington Technical Institute	President.
Elliott, Lloyd H.: Director	George Washington University	Do.
	Acacia Mutual Life Insurance Co.	Director.
	Airlie Foundation	Do.
	American Security & Trust Co.	Do.
	Washington Planetarium & Space Center	Do.
Fisher, W. Earl.: Director and Officer	C & P Telephone Co. of Maryland	Director and Officer.
	C & P Telephone Co. of Virginia	Do.
	C & P Telephone Co. of West Virginia	Do.
Frey, Ralph W.: Director and Officer		
Garlinghouse, F. Mark: Director	American Telephone & Telegraph Co.	Vice President and General Counsel.
	Ohio Bell Telephone Co.	Director.
	Sun Chemical Corp.	Do.
Grosvenor, Gilbert M.: Director	National Geographic Magazine	Editor.
	American Security & Trust Co.	Director.
	Riggs National Bank (Advisory Board)	Do.
Hoffman, Edwin K.: Director	Woodward & Lthrop.	President.
	Associated Merchandising Corp.	Director.
	American Security and Trust Co.	Do.
Jennings, Lewellyn A.: Director	Riggs National Bank	Chairman, Executive Committee.
	Metropolitan Life Insurance Co. of New York	Director.
	Potomac Electric Power Co.	Do.
	Garfinckel, Brooks Bros., Miller & Rhoads	Do.
Lawson, Belford V., Jr.: Director	Lawson, Lawson, Nesbitt, Taylor & Phillips	Attorney.
	Madison National Bank	Director.
Stadtler, John W.: Director	National Permanent Federal Savings & Loan Association.	Chairman of the board, president.
	Fireman's Insurance Co. of Washington	Director.
	National Capital Bank	Do.
	Investors Mortgage Insurance Co.	Do.
	Mortgage Investors of Washington	Do.
	International Union of Build. Societies & Savings Association.	Deputy President.
C & P TELEPHONE CO. OF MARYLAND		
Baker, Frank, Jr.: Director	Monumental Life Insurance Co.	Chairman of the board, chief executive officer.
	Monumental Corp.	Chairman of the Board.
	Volunteer State Life Insurance Co.	Director.
	Monumental Properties, Inc.	Do.
	Union Trust Co. of Maryland	Do.
	Savings Bank of Baltimore	Incorporator.
	American Life Insurance Association	Director.
Bonsack, Samuel E.: Director and President	C & P Telephone Co.	Director and President.
	C & P Telephone Co. of Virginia	Do.
	C & P Telephone Co. of West Virginia	Do.
	Beekman Downtown Hospital (New York City)	Director.
Dorsey, Dr. Rhoda M.: Director	Goucher College	President.
Dowell, J. Carson: Director	Goodyear Tire & Rubber Co. (Akron, Ohio)	Vice President.
	First National Bank & Trust Co. of Western Maryland.	Director.
	Queen City Brewing Co.	Do.
Fisher, W. Earl: Director and Officer	C & P Telephone Co.	Director and Officer.
	C & P Telephone Co. of Virginia	Do.
	C & P Telephone Co. of West Virginia	Do.

Officer or director: Title	Other corporate affiliations	Position
Harvey, F. Barton, Jr.: Director	Alex. Brown & Sons Southern Airways, Inc. American Fidelity Life Insurance Co. P. A. & S. Small Co. Baltimore & Annapolis Railroad Canton Co. Savings Bank of Baltimore Baltimore Ice Sports, Inc. Commercial Credit Co. Chamber of Commerce of Metropolitan Baltimore. Saving Bank of Baltimore	Partner. Director. Do. Do. Do. Do. Do. Do. Do. Incorporator.
Henry, T. Hughlett, Jr.: Director	Henry, Hairston & Price Maryland National Bank, Easton	Attorney. Vice chairman of the board.
Jacobs, James J.: Director and officer	First National Bank of Maryland United States Fidelity & Guaranty Co.	Director. Do.
Kettler, Milton E.: Director	Kettler Bros., Inc. Union Trust Co. of the District of Columbia	Chairman of the board. Director.
Morrel, W. Griffin: Director	First National Bank of Maryland Peterson, Howell & Heather, Inc. Provident Savings Bank of Baltimore Monumental Life Insurance Co. Monumental Corp.	Do. Do. Do. Do. Do.
Sondheim, Walter, Jr.: Director	Savings Bank of Baltimore Charles Center—Inner Harbor Management First National Bank of Baltimore Provident Savings Bank of Baltimore Baltimore Gas & Electric Co. Fair Lanes, Inc. Baltimore Life Insurance Co. Hochschild, Kohn & Co. Mercy Hospital Sinai Hospital of Baltimore	Corporator. Chairman of the board. Director. Do. Do. Do. Do. Do. Do. Do.
von Auw, Alvin: Director	American Telephone & Telegraph Co.	Vice president and assistant to chairman.
Wills, J. Blacklock: Director	Southern Maryland Oil Co. Del-Marva Oil Co., Salisbury, Md. Timmons Oil Co., Millsboro, Del. Southern Maryland Tires Bank of Southern Maryland	President. President and director. President. President and director. Director.
C. & P. TELEPHONE CO. OF VIRGINIA		
Andrews, Mason C.: Director	Norfolk General Hospital First Virginia Bank of Tidewater	Physician. Director.
Armistead, M. William, III: Director	Landmark Communications, Inc. First National Exchange Bank of Virginia Dominion Bankshares Corp. Nelson-Roanoke Corp.	President. Director. Do. Do.
Bonsack, Samuel E.: Director and president	C. & P. Telephone Co. C. & P. Telephone Co. of Maryland C. & P. Telephone Co. of West Virginia Beekman Downtown Hospital (NYC)	Director and President. Do. Do. Director.
Crosland, Edward B.: Director	American Telephone & Telegraph Co. South Central Bell Telephone Co. American Security & Trust Co. Federal Home Loan Bank of New York	Senior vice president. Director. Do. Do.
Fisher, W. Earl: Director and officer	C. & P. Telephone Co. C. & P. Telephone Co. of Maryland C. & P. Telephone Co. of West Virginia	Director and officer. Do. Do.
Halpin, Gerald T.: Director	Westgate Corp. Alexandria Amusement Corp. Lost Creek Ranch, Inc. Management Associates, Inc. Mount Vernon Motor Lodge, Inc.	President. Do. Do. Do. Do.
Harris, Edward R., Jr.: Director	United Virginia Bank—National Fidelity American Bankshares, Inc. Virginia Forests, Inc. Sta-Kleen Bakery, Inc. Belgium Tool & Die Co. Omni Services of Culpeper Craddock-Terry Shoe Corp. Carter Glass & Sons Publishers, Inc.	Director. President. Director. Do. Do. Do. Do. Do.
Hudson, Dr. Roy D., Director	Hampton Institute Peninsula United Community Services United Virginia Bank—Citizens & Marine	President. Director. Do.
Humelsine, Carlisle H.: Director	Colonial Williamsburg Foundation United Virginia Bankshares Garfinckel, Brooks Bros., Miller & Rhoads New York Life Insurance Co. Grand Teton Lodge Co. Caneel Bay Plantation, Inc.	President. Director. Do. Do. Do. Do.
Miller, Giles H., Jr.: Director	Scott & Stringfellow Culpeper National Bank (Honorary) Culpeper Broadcasting Corp.	Partner. Director. Do.

Officer or director: Title	Other corporate affiliations	Position
Modlin, George M.: Director	University of Richmond First & Merchants National Bank Richmond Memorial Hospital	Chancellor. Director. Do.
Sebrell, Thomas E., III.: Director	United Virginia Bank—National Washington Gas Light Co. United Virginia Bankshares	Chairman of the board, chief executive officer. Director. Director and Executive com- mittee.
Tait, Lee C.: Director and officer	Southern Bank & Trust Co.	Director.
Thalhimer, William B., Jr.: Director	Thalhimer Bros., Inc. Central National Bank Central National Corp. Associated Merchandising Corp. of New York Richmond Memorial Hospital Fidelity Bankers Life Insurance Co. St. Mary's Hospital	Chairman of the board, chief executive officer. Director. Do. Do. Do. Do. Do.
C. & P. TELEPHONE CO. OF WEST VIRGINIA		
Armistead, Charles S.: Director	Baker & Armistead	Partner.
Bannerot, Frederick G., Jr.: Director	Elk Refining Co. Kanawha Valley Bank	Chairman of the board. Director.
Bonsack, Samuel E.: Director and president	C. & P. Telephone Co. C. & P. Telephone Co. of Maryland C. & P. Telephone Co. of Virginia Beekman Downtown Hospital (NYC)	Director and president. Do. Do. Do.
Caldwell, Theodore J. S.: Director	First Huntington National Bank Warfolk Land Co. First Huntington Co. Central Realty Co. Fraderick Hotel J. L. Caldwell Co. Dingess Rum Coal Co. Wayne County Land & Mineral Co. Big Sandy Coal Co. Eagle Coal Co. The Realty Co. C. L. Ritter Lumber Co. Ben Williamson & Co.	Chairman of the board. Director. Do. Do. Do. President and director. Director and officer. President and director. Director and officer. Do. President and director. Director and officer. Do.
Fisher, W. Earl: Director and officer	C. & P. Telephone Co. C. & P. Telephone Co. of Maryland C. & P. Telephone Co. of Virginia	Do. Do. Do.
Gresham, Perry E.: Director	Bethany College Cooper Tire & Rubber Co. Holiday Inn, Morgantown, W. Va. Wheeling Dollar Savings & Trust Co. Kanawha Valley Bank	Chairman of the board of trustees. Director. Do. Do. Do.
Hoffmann, Frank R.: Director and officer	Stone & Thomas	Chairman of the board.
Jones, Wilbur S.: Director	Ohio Valley Business & Industrial Develop- ment Corp. Clarksburg Drug Co. Ohio Valley Drug Co. West Virginia Hospital Service Security National Bank & Trust M. Marsh & Sons Marmon Research Myers-Whaley Co. Appalachian Resources Co. Riverton Coal Co. Bank of Mount Hope	Director. Chairman and director. Do. Director and officer. Chairman of the board. Director. President. Director. Do.
Long, John B.: Director	Commercial Banking & Trust Co. Eureka Pipe Line Co. American Telephone & Telegraph Co. Thomas, Field & Co. Columbia Gas System Columbia Gas of West Virginia Columbia Gas of Kentucky	Chairman. Director. Vice president. President. Director. Do. Do.
CINCINNATI BELL, INC.		
Allen, Robert H.: Officer		
Barrett, Charles M.: Director	Southern Ohio Bank Eagle Savings Association Eagle-Picher Industries, Inc. Western-Southern Life Insurance Co.	Do. Do. Do. President.
Bonnick, Albert T.: Director and officer		
Christensen, Paul W., Sr.: Director emeritus	Central Trust Co.	Director.
Dugan, Richard T.: Director and president	William Powell Co.	Chairman of the board.
Forker, David M.: Director emeritus	Armco Steel Co.	Director.
Geier, Philip O., Jr.: Director	Cincinnati Milacron, Inc. Goodyear Tire & Rubber Co. Hobart Manufacturing Co. Procter & Gamble Co.	Chairman of the board Director. Do. Do.

Officer or director: Title	Other corporate affiliations	Position
Hall, Joseph B.: Director emeritus	Access Corp. Champion International Corp. Nationwide Real Estate Investment Trust. Tenneco, Inc.	Director. Do. Trustee. Director emeritus.
Hibbard, Dwight H.: Director and officer		
Kilgour, Bayard L., Jr.: Director emeritus	Central Trust Co. Central Bancorporation Union Central Life Insurance Co.	Do. Director. Do.
Poetker, Frances J.: Director	Jones the Florist	Owner.
Thompson, Morley P.: Director	Central Bank & Trust Co. D. H. Baldwin Co. XOMOX Corp. FMC Corp. Anchor Hocking Corp. Midland Co. Stearns & Foster Co. Cincinnati Equitable Insurance Hess & Eisenhardt Manufacturing Co.	Director. President. Director. Do. Do. Do. Do. Do. Do.
Thomson, Dwight J.: Director	Champion International Corp.	Director, special assistant to chairman.
Victor, William W.: Officer		
Wagner, Richard E.: Director	Fifth Third Bank Pepsi-Cola Bottling Co. of Cincinnati Security Investment Co.	Director. President. Director.
Whittaker, William J.: Director	Central Bancorporation Central Trust Co. Cincinnati Gas & Electric Co. U.S. Shoe Corp.	Do. Director emeritus Director. Do.
DIAMOND STATE TELEPHONE CO.		
Brown, Werner C.: Director	Hercules Inc. Delaware Trust Co. Delmarva Power	President. Director. Do.
Cashel, William S., Jr.: Director and president.	Bell Telephone Co. of Pennsylvania	Director and officer.
	Penn Mutual Life Insurance Co. First Pennsylvania Banking & Trust Co. Rorer-Amchem, Inc. Philadelphia Saving Fund Society	Trustee. Director. Do. Trustee.
Copeland, William G.: Director	Continental American Life Insurance Co.	President and chief executive officer.
	Bank of Delaware	Director.
Dawson, James H.: Director	do.	President and chairman of the board.
Hulihan, Joseph F.: Director and officer		
King, John Bedford: Officer	Bell Telephone Co of Pennsylvania	Officer.
Mathers, William P.: Director and officer	do.	Director and officer.
McCoy, Charles B.: Director	E. I. DuPont DeNemours & Co. First National City Corp. First National City Bank Wilmington Trust Co.	Chairman of the finance committee. Director. Do. Do.
Robinson, Ian W.: Officer	Bell Telephone Co. of Pennsylvania	Officer.
Shaughnessy, Robert L.: Officer	do.	Do.
Townsend, Preston C.: Director	Townsend's, Inc. Continental American Ins. Co. Millers Mutual Insurance Co. Beebe Hospital	President. Director. Do. Do.
Zimmerman, Irvin G.: Officer	Bell Telephone Co. of Pennsylvania Central Pennsylvania National Bank	Officer. Director.
Scully, Raymond F.: Officer		
ILLINOIS BELL TELEPHONE CO.		
Block, Edward M.: Officer		
Bunn, Willard, Jr.: Director	Springfield Marine Bank Bunn Capitol Co. Bunn-O-Matic Corp. Illinois National Insurance Co. Inland National Insurance Co. Sangamo Electric Co.	President. Director. do. do. do. do.
Ebersold, Charles W.: Officer	Hospital Service Corp.	do.
Franklin, John Hope: Director	University of Chicago	Professor.
Gable, Jack B.: Officer		
Handley, Jack A.: Director	Ermanco, Inc. Pullman Bank & Trust Co. Societe Francaise Whiting Ferment. South Suburban Federal Savings & Loan Association. Whiting Corp.	Director. Do. Do. Do. President and Chief Executive Officer.
	Whiting Equipment Ltd. Whiting International, Inc.	Director. Do.

Officer or director: Title	Other corporate affiliations	Position
Heineman, Ben W.: Director.....	First Bank of Chicago..... First National Bank of Chicago..... Metropolitan Life Insurance Co..... Northwest Chemco, Inc..... Northwest Industries Inc.....	Director. Do. Do. Do. President and chief executive officer.
	Northwest Industries Foundation Inc..... Chicago, St. Paul, Minneapolis & Omaha Railway Co..... Lone Star Steel Co..... Philadelphia & Reading Corp.....	Director. Do. Do. Do.
Henry, David Dodds: Director.....	University of Illinois.....	Professor.
Holditch, Stanley N.: Officer.....	Chicago Maternity Center..... Illinois State Chamber of Commerce..... Intra State Telephone Co.....	Director. Do. Do.
Hughes, Earl M.: Director.....	First National Bank..... Hughes Hybrids, Inc.....	Do. Do.
Johnson, Joseph H.: Officer.....	National Ben Franklin Insurance Co..... National College of Education.....	Do. Chairman-Board
Kertz, Hubert L.: Director.....	American Telephone & Telegraph Co..... Indiana Bell Telephone Co., Inc.....	Vice Presidents. Director.
Kottelman, Walter C.: Officer.....		
Lanterman, Joseph B.: Director.....	Amsted Industries Inc. (American Steel)..... Harris Bankcorp Inc..... Harris Trust & Savings Bank..... Illinois Central Industries..... Illinois Central R.R. Co..... International Harvester Co..... Kemperco Inc..... Peoples Gas Co..... Peoples Gas Light & Coke Co..... University Patents Inc.....	Chairman-Board Executive Officer. Director. Do. Do. Do. Do. Do. Do. Do. Do.
Latimer, Hugh A.: Officer.....	Jewel Companies Inc.....	Do.
Lunding, Franklin J.: Director.....	Thomas Industries, Inc.....	Do.
Marshall, Charles: Officer.....		
Morgn, Graham J.: Director.....	Acoustical Products (PTY) Ltd..... American Hospital Supply Corp..... BPB Industries Ltd..... Columbia Corp..... Columbia Nyematic Systems Inc..... Continental Illinois National B&T..... Continental Illinois Corp..... AP Green Refractories Co..... Illinois Central Industries..... Illinois Central Rail Road..... S.A. Gyproc-Benelux..... International Harvester Co..... Square D Co..... U.S. Gypsum Co.....	Do. Do. Do. Do. Do. Do. Do. Do. Do. Do. Do. Do. Do. Do. Do. Do. Do. Do. Do.
		Chairman of the board and chief executive officer.
Nevin, John J.: Director.....	American National Corp..... American National Bank & Trust Co. of Chicago..... FMC Corp..... Zenith Radio Corp.....	Director. Do. Do. President and chief executive officer.
Nicholson, Elmer L.: Director.....	CNA Financial Corp.....	Chairman of the board and president and chief executive officer.
Olson, Bruce F.: Director.....	American National Bank & Trust..... Sunstrand Corp.....	Director. Chairman of the board and chief executive officer.
Olson, James E.: Director and president.....	Falk Corp..... Indiana National Corp..... Statesman Insurance Co..... Harris Bankcorp, Inc..... Harris Trust & Savings Bank.....	Director. Do. Do. Do. Do.
Prothero, Robert E.: Officer.....		
Sharp, Donald H.: Officer.....		
Sinks, William A.: Officer.....		
Springer, William H.: Officer.....		
Staley, Delbert C.: Director and officer.....	Intra-State Telephone Co.....	Do.
Trutler, John T.: Officer.....		
INDIANA BELL TELEPHONE CO., INC.		
Allen, Robert E.: Officer.....		
Arbuckle, John W.: Director and president.....	American Fletcher National Bank & Trust Co.....	Do.
Ayres, Lyman S.: Director.....	Associated Dry Goods Corp..... Indianapolis Water Co..... Wirth & Co..... L. S. Ayres & Co..... Merchants National Corp.....	Do. Do. Do. Director and officer. Honorary chairman. Director.

Officer or director: Title	Other corporate affiliations	Position
Ball, Edmund F.: Director	American Fletcher Corp.	Director.
	American National Bank & Trust Co. of Muncie.	Do.
	Ball Corp.	Chairman, executive committee.
	Ball State University Foundation	Director and president.
	Borg-Warner Corp. of Chicago	Director.
	Merchants National Bank of Muncie	Do.
	Muncie Aviation Corp.	Chairman of board.
	Kindel Furniture Co.	Do.
Barnes, Charles A.: Director	Baterias Mallory de Argentina	Director.
	Contactos y Electrodo Mallory	Do.
	Indiana National Corp.	Do.
	Industrias P. R. Mallory	Do.
	Jenn-Air Corp.	Do.
	Liberty Mutual Insurance Co.	Adv. board.
	Mallory Batteries, Ltd.	Director.
	Mallory Batteries Pty. Ltd.	Do.
	Mallory Battery Co. of Canada, Ltd.	Do.
	Mallory Metallurgical Products, Ltd.	Do.
	Mallory Tiawan, Ltd.	Do.
	Mallory Timers Continental	Do.
	Mallory Timers, Ltd.	Do.
	N. V. Mallory Batteries	Do.
	Johnson Matthey & Mallory, Ltd.	Do.
	Indiana National Bank	Do.
	P. R. Mallory & Co., Inc.	President and chief executive officer.
	National Mallory Denchi KK.	Director.
	P. R. Mallory International Inc.	Do.
	State Life Insurance Co.	Do.
Berry, Thomas J.: Officer		
Cracraft, Bruce N.: Officer		
Goodrich, Henry C.: Director	Alabama Great Southern RR.	Do.
	Georgia Kraft Co.	Do.
	Indiana National Bank	Do.
	Indiana National Corp.	Do.
	Inland Container Corp.	President, chief executive officer.
	Property Management Services Inc.	Director.
	Protective Life Insurance Co.	Do.
	Southern Natural Gas Co.	Do.
	Stokely Van Camp, Inc.	Do.
	Rexford Paper Co.	Do.
	El Morro Corrugated Box Corp.	Do.
	Anderson Box Co.	Do.
Kertz, Hubert L.: Director	American Telephone & Telegraph Co.	Vice president.
	Illinois Bell Telephone Co.	Director.
Lake, Thomas H.: Director	Eli Lilly & Co.	President.
	Eli Lilly International Corp.	Director.
	Eli Lilly Endowment, Inc.	Do.
	American Fletcher National Bank & Trust Co.	Do.
	Elizabeth Arden, Inc.	Director and chairman of the board.
	Elanco Products Co.	Do.
Lloyd, Frank P.: Director	Medical Research Methodist Hospital of Indiana.	Vice president.
	Midwest National Bank	Director, chairman of the board.
MacLean, J. Allan: Director	Associates Corp. of No. America	Do.
	First Bank & Trust Co.	Do.
	Reliance Electric Co.	Do.
	ARO Corp.	Do.
	North American Sign, Inc.	Do.
	FBT Corp.	Do.
	Gladding Corp.	Do.
	Hickey Construction Co., Inc.	Do.
	Northern Indiana Public Service Co.	Do.
McKinney, Frank E., Jr.: Director	American Fletcher Corp.	Chairman of the board.
	American Fletcher National Bank & Trust Co.	Do.
	Allied International	Director.
	Southwest Savings & Loan Association	Do.
	Blue Shield of Indiana	Do.
	Stark, Wetzel Food Inc.	Do.
	Indianapolis Power & Light Co.	Do.
Reinken, Paul E.: Officer		
Risk, J. Fred: Director	Indiana National Bank	Chairman of the board and chief officer.
	Indiana National Corp.	Chairman of the board and president.
	Franklin Corp.	Director.
	Hamilton Cosco, Inc.	Do.
	Ransburg Corp.	Do.
	Inland Container Corp.	Do.
	Steak n' Shake	Do.
	Horn Drugs, Inc.	Do.
	Mutz Corp.	Do.
	London Interstate Bank Ltd.	Alternate director.

Officer or director: Title	Other corporate affiliations	Position
Ryan, John W.: Director	Indiana University	President.
Steffen, E. Andrew: Officer		
Stokely, Alfred J.: Director	American Fletcher Corp.	Director.
	American United Life Insurance	Do.
	Hawaii Fruit Packers, Inc.	Do.
	Indianapolis Power & Light Co.	Do.
	Stokely-Van Camp Inc.	President and chief executive officer.
	Stokely-Van Camp of Puerto Rico Inc.	Director.
Sutphin, Samuel R.: Director	American Fletcher National Bank & Trust Co.	Do.
	Crane Co.	Do.
	Indiana National Corp.	Do.
	P. R. Mallory & Co. Inc.	Do.
	Scott Paper Co.	Do.
	Norfolk & Western Railway Co.	Do.
	Indiana National Bank	Do.
	Derilo, Inc.	Do.
Ward, Joseph D.: Officer		
MICHIGAN BELL TELEPHONE CO.		
Bixby, H. Glenn: Director	Ex-Cell-O Corp.	Do.
	Detrex Chemical Industries, Inc.	Do.
	Detroit Edison Co.	Do.
	Ex-Cell-O Aircraft & Tool Corp.	Director and officer.
	Manufacturers National Bank, Detroit	Director.
	Michigan Chrome & Chemical Co.	Do.
Bodman, Henry T.: Director	XLD Parker Co. (Division Ex-Cell-O)	Chairman of the board.
	S. S. Kresge Co.	Director.
	National Bank of Detroit NDC.	Do.
	National Steel Corp.	Do.
Boekeloo, Kenneth J.: Officer		
Easlick, David K.: Director and president	American United Life Insurance Co.	Do.
	Circle Income Shares Inc.	Do.
	National Detroit Corp.	Do.
Ebben, William E.: Officer		
Ferguson, William C.: Officer		
Fisher, Max M.: Director	Dayco Corp.	Do.
	Fruehauf Corp.	Do.
	Michigan Consolidated Gas Co.	Do.
	Owens Illinois Inc. (Glass Co.)	Do.
	Safran Printing Co.	Chairman of the board.
	Detroit Renaissance, Inc.	Do.
Gillett, Richard M.: Director	Manufacturers National Bank of Detroit	Director.
	American Seating Co.	Do.
	Consumers Power Co.	Do.
	Grand Hotel	Do.
	Old Kent Financial Corp.	Do.
	Stekette Department Stores	Do.
	Citation Cos.	Do.
	Old Kent Bank & Trust Co.	Chairman of the board
Greber, Edward G.: Director	Wolverine Industries	Director.
Harrington, G. Robert: Officer	American Telephone & Telegraph	Vice president.
Haynes, Lloyd J.: Officer		
Hudson, Joseph L., Jr.: Director	Associated Merchandising Corp.	Director.
	J. L. Hudson Co.	Chairman.
	Detroit Edison Co.	Director.
	National Bank of Detroit	Do.
	National Detroit Corp.	Director and officer.
MacDonald, Ray W.: Director	Burrough Information Systems, Ltd.	Director.
	Burroughs De Chile, South America	Do.
	Burroughs De Columbia South America	Do.
	Burroughs Del Peru South America	Do.
	Burroughs A. B.	Do.
	Burroughs Business Machines Ltd.	Do.
	Burroughs C. A.	Do.
	Burroughs Caribbean Limited	Do.
	Burroughs Corp.	President.
	Burroughs Data Systemerlis	Director.
	Burroughs Electronica Ltda.	Do.
	Burroughs, Inc.	Do.
	Burroughs Inter-America Limited	Do.
	Burroughs International Co.	Do.
	Burroughs Leasing Co., Ltd.	Do.
	Burroughs, Limited	Do.
	Burroughs Machines Limited	Do.
	Burroughs B. V.	Do.
	Burroughs Overseas Limited	Do.
	Compania Burroughs de Venezuela, Inc.	Do.
	Compagnie Gelge Burroughs	Do.
	Industrias Mexicana Burroughs	Do.
	Societe Anonyme Burroughs	Do.
	Detroit Renaissance, Inc.	Do.
	Diamond Crystal Salt Co.	Do.

Officer or director: Title	Other corporate affiliations	Position
Parfet, Ray T. Jr.: Director	First National Financial Corp. First National Bank & Trust Gilmore Brothers Union Pump Corp. Upjohn Co.	Director. Do. Do. Do. Chairman of the board.
Plumley, A. Vern: Officer		
Rathka, Raymond A.: Officer		
Schwartz, Alan E.: Director	Burroughs Corp. Cunningham Drug Stores, Inc. Cyphernetics Corp. Detroit Edison Co. Handleman Co. Honigman, Millar, Schwartz & Cohn Howell Industries Inc. SOS Consolidated Inc. Harper Hospital	Director. Do. Chairman of the board. Director. Do. Partner. Director. Do. Do.
Shuler, Jack H.: Officer		
Smith, Dan F.: Director and Officer		
Townsend, Lynn A.: Director	Chrysler Corp. Chrysler Financial Corp. Chrysler Realty Corp. Manufacturers Hanover Corp. Manufacturers Hanover Trust Co.	Chairman of the board. Director. Do. Do. Do.
Wharton, Dolores D. (Mrs.): Director		
MOUNTAIN BELL		
Babbitt, John G.: Director	Babbitt Bros. Trading Co. Babbitt Ranches Valley National Bank, Phoenix First Federal Savings & Loan Association C. A. Biggs Associates, Inc.	President. Do. Director. Do. President.
Biggs, Clinton A.: Director		
Braucht, George W.: Officer		
Breckenridge, John H.: Director	L. L. Breckenridge Co. Idaho Power Co.	President. Director.
Cannon, J. Walton: Officer		
DeMuth, Laurence W.: Officer		
Egan, James H.: Officer		
Farr, William D.: Director	Farr Farms Co. Affiliated Bankshares of Colorado Greeley National Bank West Greeley National Bank Home Light & Power Co.	President. Chairman of the board. Director. Do. Do.
Gardner, William H.: Officer		
Hall, Charles F.: Officer		
Heckman, James W.: Officer	Continental National Bank Key Savings & Loan First National Bank of Denver	Do. Do. Do.
Jacobs, W. O.: Director and officer	Denver Dry Goods Co. Silver State Savings & Loan Association	Do. Do.
Johns, Frank J.: Director		
Killorin, James E.: Officer		
Latin, John E.: Officer		
Leger, L. L.: Officer		
Maher, James F.: Officer		
McDonald, Jack P.: Officer	First National Bank & Trust Co. Montana Physicians Service United Skyline Bank Walter S. Cheesman Realty Co. Republic Building Corporation Evans Investment Co. Alice Foster Cheesman Realty Co. First National Bank of Denver	Director. Trustee. Director. President and director. Do. Vice president and director. Do. Director.
Miller, James H.: Officer		
Moore, H., Jr.: Director	Urban League of Colorado, Inc. Turf Equipment Co. Salt Lake City Union Depot & Railroad Co. Colorado National Bank Stearns-Roger Corp.	Executive director. President. Board member. Director. President and chairman of the board.
Morris, Robert V.: Officer		
Owens, Sebastian: Director		
Parmelee, Robert L.: Officer		
Price, Howard W.: Director		
Pringle, Robert J. Officer		
Provost, Donald E.: Director	Stearns-Roger Canada Ltd. Stearns-Roger de Mexico South America Rio Grande Industries, Inc. General Iron Works Co. Denver & Rio Grande Western Railroad Co. First National Bank of Denver First National Bancorporation, Inc. Lutheran Hospital & Medical Center	Director and chairman of the board. Do. Director and chairman of the board. Director. Do. Do. Do. Do.
Snyder, Harold A.: Officer		
Stofft, Frederick R.: Director	Flori Corp. Arizona Bank American Estates Life Insurance Co. PBSW-Corp.	Chairman of the board. Director. Do. Do.

Officer or director: Title	Other corporate affiliations	Position
Timothy, Robert K.: Director and president	United Bank of Denver	Director.
	United Banks of Colorado, Inc.	Do.
Toole, John H.: Director	Toole & Easter, Inc.	Chairman of the board.
	First National Bank, Missoula	Director.
True, Henry A., Jr.: Director	True Drilling Co.	Partner.
	True Ranches	Owner.
	True Oil Co.	Partner.
	Belle Forche Pipeline Co.	President.
	Camp Creek Gas Co.	Do.
	Reserve Oil Purchasing Co.	Do.
	First National Bank of Casper	Director.
Tutt, Wm. Thayer: Director	Broadmoor Hotel, Inc.	President.
	Manitou & Pikes Peak Railway Co.	President and Director.
	Mt. Manitou Park & Incline Railway Co.	Do.
	El Pomar Investment Co.	Vice President and Director.
	San Juan Tours	Do.
	Affiliated Bankshares of Colorado, Inc.	Director.
	Kennicott Copper Corp.	Do.
	Braden Copper Co.	Do.
	Denver & Rio Grande Western Railway	Do.
	Garden City Co. & Affiliated Cos.	Do.
	First National Bank of Colorado Springs	Do.
Whalen, Kenneth J.: Director	American Telephone & Telegraph Co.	Vice President.
	American Motors Corp.	Director.
	Burroughs Corp.	Do.
	Parke, Davis & Co.	Do.
Williams, Judson F.: Director	Uptrends, Inc.	President.
	White House Department Stores	Director.
	First Savings & Loan Association	Do.
	Southern Union Gas Co.	Do.
	Arkansas Western Gas Co.	Do.
Wood, Edward R.: Director	Santa Fe Motor Co.	President and General Manager.
	Wood & Hill Corp.	Vice president and director.
	Quality Pontiac, Inc.	Do.
	First New Mexico Small Business Investment Corp.	Do.
	First National Bank of Santa Fe	Director and Chairman of the Board.
	Public Service Co. of New Mexico	Director.
NEW ENGLAND TELEPHONE CO.		
Aldrich, C. Duane: Officer		
Barker, James S.: Director	Indian Head National Bank of Concord	Chairman of the board.
	Richard I. Brew & Co., Inc.	Director.
	John Swenson Granite Co.	Do.
	Concord General Insurance Co.	Do.
Barry, Allen G.: Director	Boston Old Colony Insurance Co.	Do.
	Lur-low Corp.	Do.
	New England Mutual Life Insurance Co.	Do.
	First National Bank of Boston	Honorary director.
	First National Boston Corp.	Do.
	Suffolk Savings Bank	Trustee.
	Towle Manufacturing Co.	Director.
Cabot, Louis W.: Director	Cabot Argentina S.A. Inc.	Chairman of the board.
	Cabot Carbon of Canada Ltd.	Director and Officer.
	Cabot Carbon Ltd. (England)	Director.
	Cabot Columbina S.A.	Do.
	Cabot Corp. and subsidiaries	Chairman of the board.
	Cabot Engineering Co.	Director and officer.
	Cabot Foundation	Do.
	Cabot France S.A.	Director.
	Cabot GMBH	Adv. Cn.
	Cabot Italiana SPA	Director.
	Cabot SA	Director and officer.
	Distrigas Corp.	Director.
	Donnelley, R. R. & Sons	Do.
	Owens-Corning Fiberglas Corp.	Do.
	Federal Reserve Bank of Boston	Do.
Collier, Abram T.: Director	New England Mutual Life Insurance Co.	President.
	Houghton Mifflin Co.	Director.
	Loomis Sayles & Co. Inc.	Do.
	New England Merchants National Bank	Director-Advisory.
Dann, Harold R.: Officer		
Frost, Raymond H.: Officer		
Fellows, Haynes H., Jr.: Director and officer	State Street Boston Financial Corp.	Director.
	State Street Bank & Trust Co.	Do.
Goddard, Robert H. I.: Director	Providence Investors Co.	Do.
	Brown & Ives	Do.
	Merchants Cold Storage & Warehouse Co.	Do.
	Rhode Island Hospital Trust National Bank	Do.
	Rhode Island Hospital Trust Corp.	Do.
	Providence Washington Insurance Co.	Do.
	Providence Investors Co.	Do.
	Warwick Land Co.	President and treasurer.

Officer or director: Title	Other corporate affiliations	Position
Gordon, Elliott M.: Director	Liberty Mutual Insurance Co. Millipore Corp. National Shawmut Bank of Boston Shawmut Association Inc. Towle Manufacturing Co.	Director. Do. Do. Do. Chairman-board.
Harriman, Bruce: Officer	Arkwright Boston Manufacturers Mutual Fire Insurance Co.	Director.
Higgins, Milton P.: Director	Mutual Boiler & Machinery Insurance Co. Norton Co. Liberty Mutual Insurance Co. Worcester County National Bank	Do. Do. Honorary director. Do.
Hill, Richard C.: Director	Bank of Boston International Boston Overseas Financial Corp. First National Boston Corp. Firstbank Financial Corp. John Hancock Mutual Life Insurance Liberty Mutual Insurance Co. Polaroid Corp. First National Bank of Boston (also director of a number of subsidiaries). Raytheon Co.	Director. Do. Do. Chairman of the Board. Chief Executive Officer. Director. Do. Do. Do. Chairman of the Board. Chief Executive Officer. Director.
Hogan, William M. Jr.: Officer	New Jersey Bell Telephone Co.	Director and Officer.
Hugel, Charles E.: Director and Officer		
Landry, Robert F.: Officer	Federated Department Stores, Inc.	Chairman of the Finance Committee.
Lazarus, Maurice: Director	ITEK Corp. Mass. Mutual Life Insurance Co. First National Boston Corp. First National Bank of Boston John Hancock Mutual Life Insurance Co.	Director. Do. Do. Do. Do.
Mercer, William C.: Director and President	Boston Co. Boston Safe Deposit & Trust Co. Copper Range Co. Financial General Bankshares Inc. New England Mutual Life Insurance Co. The Provident Institution for Savings American Telephone & Telegraph Co.	Do. Do. Do. Do. Do. Do. Do.
Olmsted, George Jr.: Director	Grace W.R. & Co. Marine Midland Banks Inc. New York Stock Exchange Southwestern Bell Telephone Co. St. Vincents Hospital & Medical Center	Do. Do. Do. Do. Do.
wens, Cornelius W.: Director		
Prendiville, John F.: Officer	Saunders Bros. Inc. Canal National Bank. Coca-Cola Bottling Plants, Inc. Guy Gannett Broadcasting Service Lumber Mutual Insurance of Massachusetts United Bankcorp.	President. Director. Do. Do. Do. Do.
Saunders, Hugh C.: Director	Burlington Savings Bank	Chairman of the board and chief executive officer.
Smith, Frederick P.: Director	Mount Mansfield Co. Inc. National Life Insurance Co. Union Mutual Fire Insurance Co.	Director. Do. Do.
Torres, Rodney M.: Officer	Museum of Science	Director.
Urban, Joseph J.: Officer	John Hancock Mutual Life Insurance Co.	Do.
Washburn, Henry Bradford Jr.: Director		
NEW JERSEY BELL TELEPHONE CO.		
Brunson, J. L.: Officer		
Campbell, P. A.: Officer		
Campanella, Anton J.: Officer		
Clarke, H. Weston, Jr.: Director		
Davidson, W. F.: Officer	Merck & Co., Inc. Pharmaceutical Manufacturing Association Campbell Soup Co. Ford Motor Co. Chatham Trust Co. Pitney Hardin & Kipp American Can Co. Public Service Electric & Gas Midlantic National Bank Firemen's Fund Insurance Co. & Firemen's Fund Life Insurance Co. Midlantic Bank, Inc. American Insurance Co. Mystic Seaport Co.	Chairman of the board. Director. Do. Do. Do. Advisory board. Member. Director. Do. Do. Do. Do. Do. Do.
Gadsden, Henry W.: Director		
Henderson, D. M.: Officer		
Kipp, Donald B.: Director		
Kirchner, William L., Jr.: Officer	Bamberger's New Jersey Fidelity Union Trust Co. Fidelity Union Bancorporation Howard Savings Bank	Do. Do. Do. Board of managers.
Kleinert, Robert W.: Director and president		

Officer or director: Title	Other corporate affiliations	Position
Looloian, J. K.: Officer.....	Buddies of Young Sportsmen, Inc.....	Treasurer.
	Science Management Corp.....	Director.
Marano, Rocco J.: Director and officer.....		
McBride, Frank V.: Director.....	Frank A. McBride Co.....	Chairman of the board, chief executive officer.
	First National Bank of New Jersey.....	Director.
	Fair Lawn Industrial Park.....	Do.
	New Jersey Manufacturers Insurance Co.....	Do.
	New Jersey Manufacturers Association.....	Chairman of the Board.
O'Brien, Hubert F.: Director.....	Peerless Tube Co.....	Director.
	Howard Savings Bank.....	Do.
	Colonial Life Insurance Co.....	Do.
	Mytag Co.....	Do.
	Fidelity Union Trust Co.....	Do.
	Penn Walt Corp.....	Do.
	L.F.E. Corp.....	Do.
O'Neil, M. J.: Officer.....		
Riley, J. J.: Officer.....	Employers' Association of New Jersey.....	Board of directors.
Rozman, Charles G.: Director.....	Grand Union Co.....	Chairman of the board.
	Peoples Trust of New Jersey.....	Director.
	United Jersey Banks.....	Do.
Seabrook, John M.: Director.....	IM International.....	Chairman of the board, chief executive officer.
	South Jersey Industries, Inc.....	Director.
	McCord Corp.....	Do.
	C. Brewer & Co., Ltd.....	Do.
	Power Corp. of Canada, Ltd.....	Do.
Seegal, Herbert L.: Director.....	Toronto & London Investment Co., Ltd.....	Do.
	Midlantic National Bank.....	Do.
	J. Homestock, Inc.....	Do.
Shaub, Harold A.: Director.....	R. H. Macy, Inc.....	President.
	Campbell Soup Co.....	President and chief executive officer.
	National Association of Manufacturers.....	Director.
	Scott Paper, Ltd.....	Do.
	Penderel Corp.....	Do.
Stanton, Thomas J., Jr.: Director.....	First Jersey National Bank.....	President and chief execu- tive officer.
	Reliance Group, Inc.....	Director.
	New Jersey Machine Corp.....	Do.
	Hennessy Industries, Inc.....	Do.
	Reliance Insurance Co., Philadelphia.....	Do.
	New Jersey State Development Corp.....	Do.
	Leasco Corp.....	Do.
Wodehouse, C. J. O.: Officer.....	Americans for the Competitive Enterprise System, Inc.....	Board of directors.
	Broad Street National Bank of Trenton.....	Director.

NEW YORK TELEPHONE CO.

Ashley, George E.: Officer.....		
Burke, Robert M.: Officer.....	South Brooklyn Savings Bank.....	Trustee.
Carmichael, George J.: Officer.....		
Dolan, Peter A.: Officer.....		
Emerson, Daniel E.: Officer.....		
Ellinghaus, William M.: Director and president.....	Ball Corp.....	Director.
	Bankers Trust Co.....	Do.
	Bristol Myers Co.....	Do.
	J. C. Penney, Co., Inc.....	Do.
Fippinger, Grace J.: Officer.....		
Getz, Colin W.: Officer.....	State Bank of Albany.....	Director and executive com- mittee.
Hall, Floyd D.: Director.....	Cluett Peabody & Co., Inc.....	Director.
	Eastern Airlines, Inc.....	President and chairman of the board.
	Royal Bank of Canada.....	Director.
	Southeast Banking Corp.....	Do.
Hamilton, Fowler: Director.....	Cleary, Gottlieb, Steen & Hamilton.....	Senior partner.
	Mutual Life Insurance Co. of New York.....	Trustee.
Hanes, Eldon C.: Officer.....	Bankers Federal Savings & Loan Association.....	Director.
Hauge, Gabriel: Director.....	American Home Products Corp.....	Do.
	American Metal Climax Inc.....	Do.
	Brooklyn Union Gas Co.....	Do.
	Chrysler Corp.....	Do.
	Discount Corp. of New York.....	Do.
	Manufacturers Hanover Corp.....	Chairman of the board.
	Manufacturers Hanover International Bank- ing Corp.....	Director.
	Manufacturers Hanover International Finan- cial Corp.....	Do.
	New York Life Insurance Co.....	Do.
	Manufacturers Hanover Trust Co.....	Chairman of the board.

Officer or director: Title	Other corporate affiliations	Position
Hinman, George L.: Director	Arlington Hotel, Inc.	Director.
	Lincoln First Banks, Inc.	Do.
	First City National Bank of Binghamton	Do.
	Hinman Howard & Kattell	Partner.
	IBM Corp.	Director.
	Russell Reynolds Associates Inc.	Do.
	Security Mutual Life Insurance Co. New York	Do.
Houghton, Amory, Jr.: Director	Corhart Refractories Co.	Do.
	Corning Glass International S.A.	Do.
	Corning Glass Works	Chairman of the board, chief executive office.
	Corning Glass Works of Canada Ltd.	Director.
	Corning International Corp.	Do.
	Dow Corning Corp.	Mbr. Co.
	First National City Bank of New York	Director.
	IBM Corp.	Do.
	Signetics Corp.	Do.
	Pittsburgh Corning Corp.	Do.
Keenan, Arthur J.: Officer		
Levy, Gustave: Director	Bowery Savings Bank	Trustee.
	Braniff Airways Inc.	Director.
	Deltec International Ltd.	Do.
	Deltec Panamerica S.A.	Do.
	Diebold, Inc.	Director and officer.
	Foster Grant Co.	Director.
	Goldman Sachs & Co.	Partner.
	Gulf Life Holding Co.	Director.
	LCA Corp.	Do.
	LCA Corp. Arnex Industrial Merger	Do.
	LTV Corp. (Ling Temco Vought, Inc.)	Do.
	Keebler Co.	Do.
	May Department Stores	Do.
	New York Stock Exchange	Do.
	Norton Simon, Inc.	Do.
	Patagonia Corp.	Do.
	Samsonite Corp. (SC Liquidating)	Do.
	Studebaker Worthington, Inc.	Do.
	Talcott National Corp.	Do.
	Technicon Corp.	Do.
	Trans-World Life Insurance Co. of New York	Do.
	Weis Markets Inc.	Do.
	Witco Chemical Corp.	Do.
Lindholm, William L.: Director	Acacia Mutual Life Insurance Co.	Do.
	American Telephone & Telegraph	Director and vice chairman.
	Bell Telephone Laboratories	Director.
	Manufacturers Hanover Corp.	Do.
	Southern Bell Telephone & Telegraph Co.	Do.
	Manufacturers Hanover Trust Co.	Do.
Mathews, Richard A.: Officer		
McDermott, Frank A., Jr.: Officer		Do.
Mortola, Edward J.: Director	Bank of New York Co., Inc.	Do.
	County Trust Co.	Do.
	Beekman Downtown Hospital	Do.
	Pace University	President.
	Franklin Society Savings & Loan	Director.
Moses, Francis J.: Officer		Do.
Myers, Donald S.: Officer	Lincoln First Banks Inc.	Do.
	National Bank of Westchester	Director and executive committee.
	Port Chester Rye Savings Bank	Trustee.
Oberst, Leopold P.: Officer	Empire City Subway Co.	Director and member ex- ecutive committee.
Schuster, Howard L.: Officer	Franklin General Hospital	Director.
Segall, John L.: Director and executive vice president.	United Bank Corp. of New York	Do.
Sharwell, William G.: Director and Ex- ecutive vice president.	Brooklyn Savings Bank	Do.
	County Trust Co.	Do.
	Empire City Subway Co.	Director and officer.
	U.S. Life Insurance Co.	Director.
Thomas, Franklin A.: Director	Allied Stores, Inc.	Do.
	Columbia Broadcasting Systems, Inc.	Do.
	Cummins Engine Co.	Do.
	First National City Bank	Do.
	New York Life Insurance Co.	Do.
	First National City Corp.	Do.
	Bedford-Stuyvesant Restoration	President.
Villiere, Paul M.: Officer		
Wagner, Philip: Officer		
Wallace, Martha R.: Director	Henry Luce Foundation, Inc.	Vice president and executive director.
	Bowery Savings Bank	Trustee.
	Bristol Myers Co.	Director.
	Scudder Duo-Vest Exchange Fund, Inc.	Do.
	Scudder Duo-Vest, Inc.	Do.

Officer or director: Title	Other corporate affiliations	Position
Walsh, John M.: Officer	Allegheny Ludlum Industries, Inc.	Director.
Wendel, William H.: Director	American Research & Development Corp.	Do.
	Carborundum Co.	President.
	Dunlop Tire & Rubber Co.	Director.
	Marine Midland Banks, Inc.	Do.
Yunich, David L.: Director	Metropolitan Transportation Authority	Chairman.
	Diners Club, Inc.	Director.
	East River Savings Bank	Do.
	Harwood Cos.	Do.
	Londontown Manufacturing Co.	Do.
	U.S. Industries, Inc.	Do.
	Prudential Life Insurance Co. of America	Do.
NORTHWESTERN BELL TELEPHONE CO.		
Binger, James H.: Director	Chase Manhattan Bank, N.A.	Do.
	Chase Manhattan Corp.	Do.
	Honeywell Inc.	Chairman of the board and chief executive officer.
	Northwest Airlines, Inc.	Director.
	Northwest Bancorporation	Do.
	Minnesota Mining & Manufacturing Co.	Do.
Butler, James A.: Officer	Dow Jones & Co., Inc.	Do.
Cross, Bert S.: Director	First National Bank St. Paul	Do.
	Morgan Guaranty Trust Co.	Member international.
	St. Paul Companies, Inc.	Director.
	3 M Co.	Chairman of finance committee.
	Exxon Corp.	Director.
D'Audney, W. Noel: Officer	Leo A. Daly Co.	President.
Daly, Leo A.: Director	U.S. National Bank of Omaha	Director.
	Central National Insurance Group	Do.
Daudney, W. Noel: Agent. ser.	Burlington Northern, Inc.	Do.
Dayton, Donald C.: Director	Dayton Hudson Corp.	Do.
	Northwest Bancorporation	Do.
Dennis, Carter W.: Director	Racon, Inc.	Do.
	Dennis Supply Co.	President.
	Home Federal Savings & Loan	Director.
	First National Bank	Do.
	Sioux-Preme Packing Co.	Do.
	KTIV TV Station	Do.
Doerr, Howard P.: Officer	Younkee Brothers Inc.	President.
Duchen, Charles: Director	Younkers Department Store	Director.
	Central National Bank, Des Moines	Do.
	Bankers Life Co.	Do.
	Financial Security Insurance Group	Do.
	Iowa Power & Light Co.	Do.
	Microma Watch Co.	Do.
Hosford, Willard D., Jr.: Director	H. H. Leasing Co.	President and director.
Hubbs, Ronald M.: Director	St. Paul Co., Inc. (insurance)	Chairman.
	Burlington Northern, Inc.	Director.
	First Bank System	Do.
	Economics Laboratory, Inc.	Do.
	Toro Co.	Do.
Jordan, Arthur J., Jr: Director	First Bank System Inc.	Do.
	Jordon Millwork Co.	Chairman of the board and chief executive officer.
	National Bank of South Dakota	Director.
Keogh, Brooks J.: Director	Keogh Land & Cattle Co.	Owner and operator.
MacAllister, Jack A.: Officer		
Morris, Ben R.: Officer	American Telephone & Telegraph	Vice president.
Flint, Robert N.: Director	General Mills, Inc.	Chairman of the board and chief executive officer.
McFarland, James P.: Director	Prudential Insurance Co. of America	Director.
	Toro Co.	Do.
	Federal Reserve Bank, Minneapolis	Do.
	Shenandoah Oil Corp.	Do.
Hulse, John E.: Officer		
Hargitt, R. Jerry: Officer	Bankers Life Co.	Do.
Nurnberger, Thomas S.: Director president	Northern Natural Gas Co.	Do.
	Northwest Bancorporation	Do.
	U.S. National Bank of Omaha	Do.
Nyrop, Donald W.: Director	First Bank System, Inc.	Do.
	Gould, Inc.	Do.
	Honeywell, Inc.	Do.
	Minnesota Mutual Life Insurance Co.	Do.
	Northwest Airlines, Inc.	President.
Parks, W. Robert: Director	Iowa State University	Do.
	Central Life Assurance Co.	Director.

Officer or director: Title	Other corporate affiliations	Position
Pillsbury, John S., Jr.: Director	Farmers & Mechanics Savings Bank North Atlantic Life Insurance Co. Northwestern National Bank of Minneapolis Title Insurance Co. of Minnesota Boise Cascade Corp. Minnesota Title Finance Insurance Co. Northwest Bancorporation Northwestern National Life Insurance Co. Pillsbury Co. Sargent Management Co.	Trustee. Chairman of the board. Director. Do. Do. Do. Do. Chairman and chief executive officer. Director. Director and officer.
Power, Kenneth D.: Officer		
Quinlan, Melvin R.: Couns. ISS		
Ruan, John: Director	Ruan Transport Corp. Ruan Leasing Co. Ruan Cab Co. Ruan Aviation Corp. Carriers Insurance Co. United Canada Insurance Co. Bankers Trust Co. Iowa Power & Light Co. Equitable Life Insurance of Iowa Northwestern States Portland Cement Co.	President. President and director. Do. Do. Do. Do. Director and chairman executive committee. Director. Do. Do.
Runice, Robert E.: Officer		
Schwartz, Bruce G.: Officer		
Stauffer, William A.: Officer		
Strauss, Willis A.: Director	Northern Natural Gas Co. Omaha National Corp. Omaha National Bank	Chairman and president. Director.
Ward, L. Emmerson: Director	Mayo Clinic	Chairman of the board of governors.
Waterman, Larned A.: Director	Lane & Waterman Davenport Bank & Trust Co. DRI & NW Railway Co.	Partner. Director. Do.
OHIO BELL TELEPHONE CO.		
Boyer, Robert O.: Officer	Champaign Telephone Co. Blue Cross of Northeast Ohio	Do. Trustee.
Cornell, William A.: Officer	Cleveland Builders Supply Huron Road Hospital	Director. Trustee.
De Lancey, William J.: Director	Republic Steel Corp. The Cleveland Trust Co. Standard Oil Co. Sherwin-Williams Co. Reserve Mining Co. Liberia Mining Co., Ltd. Beatrice Pocahontas Co. Marymount Hospital. K. & S. Metal Supply Co. Cleveland Trust Corp. Donnrr-Hawna Coke Corp. A. Finkl & Sons, Ltd. Iron Ore Co. of Canada Mooney Aircraft Corp. Northern Land Co. Republic Steel Enterprises, Inc. Republic Steel International Republic Supply Co. R-N Corp. St. Paul Iron Mining Co. Tankore Corp. Union Drawn Steel Co. Vance Iron & Steel Co.	President and chief executive officer. Director. Do. Do. Do. Director and chairman Director. Do. Do. Do. Do. Chairman and director. Director. Do. Do. Do. Do. Chairman and director. Director. Director and president. Director. Chairman and director. Director.
Estler, Charles K.: Officer	Champaign Telephone Co. Winters Bank & Trust Co. Winters National Corp.	Director and member of executive committee. Director. Do.
de Windt, E. Mandell: Director	Eaton Corp. American Can Co. Cleveland Trust Co. Detroit Edison Co. Diamond Shamrock Corp. Mogul Corp.	Chairman and chief executive officer. Director. Do. Do. Do. Do.
Dodd, Edwin D.: Director	Owens-Illinois, Inc. Goodyear Tire & Rubber Co. National Petro Chemical Corp. Potomac Riverside Farms, Inc. Toledo Trust Co. Northwest Ohio Bancshares, Inc.	President and director. Director. Do. Do. Do. Do.

Officer or director: Title	Other corporate affiliations	Position
Eckley, Frederick R.: President and director.	Central National Bank of Cleveland.....	Director.
	Centran Bancshares Corp.....	Do.
	Eaton Corp.....	Do.
	Galbreath First Mortgage Investments.....	Trustee.
	Republic Steel Corp.....	Director.
Fawcett, Novice G.: Director.....	Ohio State University.....	President emeritus.
	Buckeye Federal Savings & Loan Association.....	Director.
	Galbreath First Mortgage Investments.....	Trustee.
	Mutual Investing Foundation.....	Do.
	Ohio State Life Insurance Co.....	Director.
Galbreath, Daniel M.: Director.....	City National Bank & Trust Co., of Columbus.....	Do.
	Galbreath First Mortgage Investments.....	Trustee and member of executive committee.
	Galbreath-Ruffin Corp. (New York).....	Executive vice president.
	John W. Galbreath & Co. (Pittsburgh).....	Associates.
	Pittsburgh Pirates Baseball Club.....	President and director.
	Marcor Inc.....	Director.
Garlinghouse, F. Mark: Director.....	American Telephone & Telegraph.....	Vice president and general counsel.
	Chesapeake & Potomac Telephone Co., Wash- ington.....	Director.
Keener, J. Ward: Director.....	Sun Chemical Corp.....	Do.
	Campbell Soup Co.....	Do.
	B. F. Goodrich Co.....	Do.
	Federal Reserve Bank of Cleveland.....	Do.
Kline, Hayden B.: Director.....	Van Straaten Chemical Co., Chicago.....	Director and member of executive committee.
MacDonald, William E.: Director and officer.	Newark Telephone Co.....	Director.
	BancOhio Corp.....	Do.
	Ohio National Bank of Columbus.....	Do.
Oelman, Robert S.: Director.....	National Cash Register Co.....	Chairman of the board.
	First National City Bank, New York.....	Director.
	Ford Motor Co., Detroit.....	Do.
	Koppers Co., Inc., Pittsburgh.....	Do.
	Procter & Gamble Co., Cincinnati.....	Do.
	Winters National Bank & Trust Co.....	Do.
	Winters National Corp.....	Do.
	First National City Corp.....	Do.
Spahr, Charles E.: Director.....	Standard Oil Co., Ohio.....	Chairman and chief execu- tive officer.
	Cleveland Electric Illuminating Co.....	Director.
	Harris-Intertype Corp.....	Do.
	National City Bank, Cleveland.....	Do.
	Republic Steel Corp.....	Do.
	White Motor Co.....	Do.
Walker, Ned L.: Officer.....	Champaign Telephone Co.....	Do.
Cogan, Robert E.: Officer.....		
Lewis, Carl C., Jr.: Officer.....		
McCoy, Elmore K.: Officer.....		
Morrison, Donald W.: Officer.....		
Reed, Joseph D.: Officer.....		

PACIFIC NORTHWEST BELL

Bunn, Wallace R.: Director and president..	National Bank of Commerce.....	Do.
	Washington Mutual Savings Bank.....	Trustee.
	Marine Transportation.....	Director.
Cannon, Garnett E.: Director.....	Standard Management, Inc.....	President.
	Standard Insurance Co.....	Director.
	Northwest Data Systems.....	Do.
	U.S. Bancorp Realty & Mortgage Trust.....	Trustee.
Gundersen, Donald L.: Officer.....	Pacific First Federal Savings & Loan Associa- tion.....	Director.
Hayner, Herman H.: Director.....	Monro & William Low-Cost Drug.....	Director and secretary.
	Minnick & Hayner.....	Counsel.
Holloway, Harry H.: Officer.....		
Hult, Nils B.: Director.....	Nils B. Hult & Associates.....	Owner.
	Citizens Bank of Eugene.....	Director.
	Town & Travel, Inc.....	Do.
Jenkins, William M.: Director.....	Seattle-First National Bank.....	Chairman of the board.
	Scott Paper Co.....	Director.
	SAFECO Corp.....	Do.
	Rothschild International Bank, Ltd., London ..	Do.
	Western Gear Co.....	Do.
	United Airlines and UAL, Inc.....	Do.
	Everett Improvement Co.....	Do.
Kreager, H. Dewayne: Director.....	Pacific First National Savings & Loan Associa- tion.....	Chairman and president.
	Washington Natural Gas Co.....	Director.
	Rainier Cos., Inc.....	Do.
	Univar Corp.....	Do.
	URS Systems Corp.....	Do.
	Scientific Advances, Inc.....	Do.
	Petroleum Exploration & Development Funds Inc.....	Do.
	VWR United Corp.....	Do.

Officer or director: Title	Other corporate affiliations	Position
Lane, C. Howard: Director	St. Vincent Hospital Mount Hood Radio & Television Broadcasting Corp. First National Bank of Oregon Pacific Power & Light Standard Insurance Co. Astoria Broadcasting Co.	Director. President. Director. Do. Do. Do.
Lilley, Robert D.: Director	American Telephone & Telegraph Pacific Telephone & Telegraph Co. Bell Telephone Laboratories, Inc. Continental Corp. Mutual Benefit Life Insurance Co. Chase Manhattan Corp. Chase Manhattan Bank, N.A. Fidelity Union Bancorporation R. H. Macy & Co., Inc.	President and director. Director. Do. Do. Do. Do. Do. Do. Do.
Lord, George R.: Officer		
Mickelwait, Lowell P.: Director	Perkins, Coe, Stone, Disen & Williams Puget Sound Power & Light Co. Boeing Co.	Counsel. Director. Director emeritus.
O'Brien, Robert D.: Director	PACCAR Inc. Weyerhaeuser Co. Puget Sound Power & Light Co. Univar Corp. Washington Metal Trades, Inc. VWR United Corp.	Chairman of the board. Director. Do. Do. Do. Do.
Read, Eliot C.: Officer		
Robbins, Don J.: Officer		
Rupp, John N.: Officer	Safeco Growth Fund Safeco Income Fund Safeco Equity Fund Safeco Western Fund	Do. Do. Do. Do.
Sandbeck, Knut: Officer		
Skinner, David E.: Director	Skinner Corp. Pacific Marine Schwabacher, Inc. Boeing Co. Safeco Corp. Alpac Corp. Pentagram Corp. Crows Nest Industries, Ltd. Bank of California, N.A. Alaska Trainship Corp.	Director and president. Chairman and director. Director. Do. Do. Do. Do. Do. Chairman and director.
Smith, Andrew V.: Director and officer	Sterling Vineyards U.S. National Bank of Oregon United States Bancorp.	Director. Do. Do.
Street, William S.: Director	Univar Corp. New England Fish Co. Seattle-First National Bank National Airlines, Inc. Washington Mutual Savings Bank VWR United Corp.	Chairman of the board. Director. Do. Do. Do. Do.
Stubner, James W.: Officer		
Tilford, Charles A.: Director	Bitco, Inc. Comet Corp. Seattle First National Bank	President. Member. Spokane advisory board.
Weatherford, Marion T.: Director	United States National Bank of Oregon Arlington Builders' Corp.	Director. Vice president and secretary.
PACIFIC TELEPHONE & TELEGRAPH CO.		
Bell, Hewes A.: Officer		
Bryant, Daniel P.: Director	Bank of America NT & SA Bankamerica Corp. Bekins Co. (Van and Storage) Forest Lawn Co. Iverson, Yoakum, Papiano & Hatch, Law Olga Co. Pacific Lighting Corp.	Director. Do. Honorable chairman of the board. Regent. Counsel. Director. Do.
Cassidy, Adrian C.: Officer	Bell Telephone Co. of Nevada KQED (Educational Television)	Do. Vice president & director.
DeBois, James A.: Officer		
DeGuigne, Christian, III: Director	Bancal Tri State Corp. Bank of California Stauffer Chemical Co. Mills Memorial Hospital	Director. Do. Chairman of the board. Director.
Dial, Ben W.: Officer		
DiGiorgio, Robert: Director	Bank of American NT & SA Bankamerica Corp. Carter, Hawley, Hale Stores, Inc. DiGiorgio Corp. Newhall Land & Farming Co. Union Oil Co. of California	Director. Do. Do. Chairman of the board. Director. Do.

Officer or director: Title	Other corporate affiliations	Position
Ducommun, Charles E.: Director	Dillingham Corp. Ducommun, Inc. Investment Co. of America Security Pacific Corp. Security Pacific National Bank Crocker National Bank	Director. President. Advisory director. Director. Do. Do.
Fenlon, Roberta F.: Director		
Gerrish, Harold A.: Officer		
Godfrey, Samuel A.: Officer	Bell Telephone Co. of Nevada	Director.
Gordon, James E.: Officer		
Haas, Walter A., Jr.: Director	Bankamerica, NT & SA Great Western Garment Co., Edmonton, Canada Iris Securities Levi Strauss & Co.	Director. Do. Officer. Chairman of the board and chief executive officer.
Hale, Stanton G.: Director	Association of California Life Insurance Cos. Carter, Hawley, Hale Stores, Incorporated Pacific Mutual Life Insurance Co. Southern California Edison Co. United California Bank Western Bancorporation	Director. Do. Chairman of the board and chief executive officer. Director. Do. Do.
Harding, Edward F.: Officer		
Haught, Harold B.: Officer		
Hawley, Philip M.: Director	Bank of America, NT & SA Carter, Hawley, Hale Stores, Inc. Olga Company	Director. President. Director.
Hough, Gordon Letts: Director and officer	Ameron Inc. (Pipe & Construction Co.) Bell Telephone Co. of Nevada Pacific American Income Shares Inc. United California Bank	Do. Do. Do. Do.
Hull, Jerome W.: Director and president	Bell Telephone Co. of Nevada Crocker National Bank Crocker National Corp. DiGiorgio Corporation (Fruit) New York Life Insurance Co.	Do. Director and member of Executive Committee. Do. Director. Director and member of Executive Committee.
Joses, Robert M.: Officer	Pacific Southwest Airlines (PSA) Coldwell, Banker & Co.	Director. Do.
Kenney, James E.: Officer	Beneficial Standard Corporation Capital Guardian Trust Co.	Do. Do.
Latno, Arthur C., Jr.: Officer		
Lilley, Robert D.: Director	American Telephone & Telegraph Bell Telephone Laboratories Chase Manhattan Bank NA Chase Manhattan Corp. Continental Corp. Fidelity Union Bancorporation R. H. Macy & Co. Mutual Benefit Life Insurance Co. Pacific Northwest Bell Telephone Co.	Director and President. Director. Do. Do. Do. Do. Do. Do. Do.
Luttgens, Leslie L.: Director	UBAC	President.
McEnerney, Garret II: Director	Bank of America NT & SA Macy's California	Director. Do.
Pollard, Dean R.: Officer	Bell Telephone Co. of Nevada	Do.
Quirk, William E.: Officer	Central Federal Savings & Loan Association	Do.
Sheffield, Gilbert L.: Officer		
Skibinski, Robert U.: Officer		
Smith, William French: Director	Gibson, Dunn & Crutcher Crocker National Bank Pacific Lighting Corp. Pacific Mutual Life Insurance Co.	Partner. Director. Do. Do.
Solomon, Emmett G.: Director	Almaden Vineyards Inc. Clorox Co. Crocker National Bank Crocker National Corp. Fibreboard Corp.	Do. Do. Director and member, Executive Committee. Chairman of the Executive Committee. Director and officer. Director and finance committee member.
Stubenrauch, Carl W.: Officer	Metropolitan Life Insurance Co. Mills Memorial Hospital Pacific Gas & Electric (Transmiss)	Director. President of the board. Director.
Waters, L. Reed: Officer	Union Sugar Co. First National Bank of San Jose	Do. Do.
Woods, William: Officer	Bell Telephone Co. of Nevada	Do.
Ziegler, Glenn M.: Officer		

SOUTH CENTRAL BELL TELEPHONE CO.

Bauer, W. Cecil: Director and president	American Air Filter Co., Inc. Federal Reserve Bank of Atlanta, Birmingham Liberty National Life Insurance Co.	Do. Do. Do.
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Officer or director: Title	Other corporate affiliations	Position
Beaird, J. Pat: Director	Beaird Oil Corp. Coml. National Bank Shreveport. Kansas City Southern Industries Inc. Louisiana & Arkansas RR. Kansas City Southern Railway Life Ins. Co. of Kentucky	President. Director. Do. Do. Do. Director and officer.
Broadbent, Smith D., Jr.: Director	Broadbent Hybrids, Inc. Federal Reserve Bank, St. Louis. West Kentucky Liquid Fertilizer Co. Cedar Bluff Land Co. Broadbent-Bingham Food Products, Inc. Farmco, Inc.	Owner. Director and deputy chair- man. Director. Do. President. Do.
Brown, Ben B.: Officer		
Carter, W. Reginald: Officer		
Crosland, Edward B.: Director	American Security & Trust Co. (Washington, D.C.). American Telephone & Telegraph. C. & P. Telephone Co. of Virginia Federal Home Loan Bank of NY	Director. Officer. Director. Do.
Eaves, Hettie D. (Mrs.): Director	Avondale Shipyards, Inc. Powers, Carpenter & Hall	Executive vice president. Director.
Fincher, Murray C.: Officer	ICB Corp.	Do.
Frost, Norman C.: Officer		
Gentle, Edgar C., Jr.: Officer		
Hearin, Robert M.: Director	First National Bank of Jackson Amerada Corp. (Hess) First Capital Corp. Intersystems Inc.	Chairman of the board and chief executive officer. Director. Director and president. Chairman of the board and president.
	Lamar Life Corp. Mississippi Power & Light Co. School Pictures Inc. WJDX Inc. Mississippi Valley Title Insurance Co. United Gas, Inc.	Director. Do. Do. Chairman of the board. Director. Do.
Holt, Andrew D.: Director	University of Tennessee System Provident Life & Accident Insurance Co. Hamilton International Corp. Hamilton National Bank	President emeritus. Director. Do. Do.
McCandless, Paul D.: Officer	Kentucky Independent College Foundation Louisville Automobile Club Louisville Chamber of Commerce Louisville Trust Co. Norton Children's Hospital	Officer. Director. Officer. Director. Do.
Mobley, John M.: Officer	First Capital Corp.	Do.
Monaghan, Bernard A.: Director	Beatrice Foods Co. Birmingham Trust National Bank Protective Life Insurance Co. Vulcan Materials Co.	Do. Do. Do. President and chief execu- tive officer.
Morgan, Allen: Director	Federal Co. First National Bank Memphis First Tennessee National Corp. Holiday Inns Inc. Mohasco Industries Inc. Murphy Oil Corp. First Memphis Realty Trust	Director. Honorary director and officer. Chairman of the board and chief executive officer. Director. Do. Do. Chairman of the board of trustees.
New, Virgil E.: Officer		
Purvis, George Frank, Jr.: Director	Compania de Seguros Panamericana First National Bank of Commerce Pan American de Mexico Companiade Seguros. Pan American de Venezuela Pan American Life Insurance Co.	Director and president. Director. Do. Director and president. Chairman of the board, president and chief execu- tive officer.
	Southern Airways Inc. Golden Flake Inc. Liberty National Life Insurance Co. Saunders Leasing System Inc. Southern Co. West Point Pepperell Inc. Alabama Great Southern RR Co. Hackney Corp.	Director. Do. Chairman of the board. Director. Do. Do. Do. Do.
Self, William K.: Director	Pacific Buildings, Inc. Federal Home Loan Bank of Little Rock	President. Director.
Shaver, Jesse M., Jr.: Director	American Air Filter Co., Inc. Louisville Trust Co. Reliance Universal Inc. Commonwealth Life Insurance Co.	Chairman of the board and president. Director. Do. Do.

Officer or director: Title	Other corporate affiliations	Position
Smith, Frank T.: Officer	Avondale Mills	Chairman of the board.
Smith, J. Craig: Director	Birmingham Trust National Bank	Director.
	First Federal Savings & Loan Association	Chairman of the board.
	Illinois Central RR	Director.
	Illinois Central Industries	Do.
	Protective Life Insurance Co.	Do.
	Kowikee Mills	Do.
Tuttle, John C.: Officer		
Williamson, Clifton R.: Director and officer		
SOUTHERN BELL TELEPHONE & TELEGRAPH CO.		
Allen, Ivan, Jr.: Director	Atlanta Braves, Inc.	Do.
	Cox Broadcasting Corp.	Do.
	Equitable Life Assurance Society	Do.
	Ivan Allen Co.	Chairman of the board.
	Mead Corp.	Director.
	Rich's, Inc.	Do.
	Southern Airways	Do.
Brown, James M.: Officer	First National Bank of Miami	Do.
Cameron, C. Clifford: Director	Association of Registered Bank Holding Companies.	Do.
	Cameron-Brown Co., Raleigh, North Carolina	Do.
	Cameron Financial Corp., Charlotte, North Carolina	Chairman of the board and president.
	First Union National Bank of North Carolina	Chairman of the board, president and chief executive officer.
	Charlotte Branch Federal Reserve Bank of Richmond.	Director.
Criser, Marshall M.: Director	Columbia Life Insurance Co. of Florida	Director and general counsel.
	Columbia National Corporation	Director.
	First National Bank, Palm Beach, Florida	Vice president and resident counsel.
	Gunster, Yoakley, Criser, Steward & Hersey	Partner (attorney).
	Home Federal Savings & Loan Association, Palm Beach.	Director and general counsel.
Crouch, Zach T., III: Officer		
Davis, A. Darius: Director	Winn-Dixie Stores, Inc.	Vice chairman of the board.
Dial, William H.: Director	Florida Gas Co.	Director.
	Florida Gas Utilities Co.	Do.
	Florida Gas Transmission Co.	Do.
	Granada Groves Corp.	Do.
	Seaboard Coast Line RR & SCL Industries	Do.
	Sun Bank of Gainesville	Do.
	Sun Bank of Ocala	Do.
	Sun Banks of Florida, Inc.	Chairman of the Executive Committee.
	Sun First National Bank of Leesburg	Director.
	Sun First National Bank of Orlando	Chairman of the Board of Directors.
	First Pt. Orlando Corp.	Chairman of the Board and chief Executive officer.
Dobbs, R. Howard, Jr.: Director	Atlanta Gas Light Co.	Director.
	Life Insurance Co. of Georgia	Chairman of the board.
	Rich's, Inc.	Director.
	Trust Co. of Georgia	Chairman trust committee and director.
Dorsey, Jasper N.: Officer	Fulton National Bank	Director.
	Fulton National Corp.	Do.
Evans, John P.: Officer		
Hemingway, Glen A.: Officer		
Jennette, Sidney E., Jr.: Officer	Miami Beach First National Bank	Director.
Johnson, Nathaniel R.: Officer		
Lindholm, William L.: Director	Acacia Mutual Life Insurance Co.	Director.
	American Telephone & Telegraph	Director and vice chairman of board.
	Bell Telephone Laboratories	Director.
	Manufacturers Hanover Corp.	Do.
	New York Telephone Co.	Do.
	Manufacturers Hanover Trust Co.	Do.
McIntyre, John E.: Officer		
Marsh, Harry R.: Officer	South Carolina National Bank	Advisory board.
O'Herron, Edward M., Jr.: Director	Akzona, Inc.	Director.
	Eckerd Drugs, Inc.	Chairman of the board.
	Metropolitan Savings & Loan Association	Director and treasurer.
	Piedmont Aviation	Director.
	Piedmont Natural Gas Co.	Do.
	Wachovia Bank & Trust Co., N.A.	Do.
	Synalloy Corp.	Do.

Officer or director: Title	Other corporate affiliations	Position
Rast, L. Edmund: Director and president	First National Bank of Atlanta First National Holding Corp. Metropolitan Life Insurance Co.	Director. Do. Do.
Skinner, B. Franklin: Officer	Cameron Financial Corp. First Union National Bank	Do. Do.
Small, Robert S.: Director	Dan River, Inc. Liberty Life Insurance Co. Morton-Norwich Products, Inc. Piedmont Natural Gas Co. Testile Hall Corp.	President and chief executive officer. Director. Do. Do. Do. Do.
Smith, Edward D.: Director	Eastern Air Lines, Inc. First National Bank of Atlanta First National Bank of Dalton Georgia Power Co. Retail Credit Co. Kroger Co.	Chairman of the board and president. Director. Do. Do. Do. Do.
Smith, O. Stanley, Jr.: Director	Constan, Inc. Exxon Co. Standard Savings & Loan Association	Chairman of the board. Commission agent Director.
Stanford, Henry King: Director	University of Miami Sunbeam Television Corp.	President. Director.
Tarver, Jackson W.: Director	American Motors Corp. Associated Press Atlanta Newspapers and Cox Enterprises, Inc. Citizens and Southern Realty Investors Maccabees Mutual Life Insurance Co. Newspaper Advertising Bureau	Do. Do. President. Director. Do. Do.
Travis, J. Wm.: Director and officer		
Trice, Reginald R.: Director	First National Bank & Trust Co. Georgia Southern and Florida Railway Co. Land Developers, Inc. Georgia Motor Club (AAA) Georgia Telco Credit Union Hatteras Income Securities, Inc.	Director, executive committee and trust committee chairman. Director. President. Director. Do. Do.
SOUTHERN NEW ENGLAND TELEPHONE		
Coles, Albert L.: Director	United Illuminating Co. Eastern Electric Construction Co., Inc. Park City Hospital Coles, O'Connell, Dolan & McDonald P. C. People's Saving Bank	Do. Do. Do. Partner. Director-trustee and coporator.
Craig, John H.: Officer		
Diefenderfer, William E.: Director	C. G. Fund, Inc. Hartford National Bank & Trust Co. United Aircraft Corp.	Director. Advisory board. Group vice president.
Davis, Abbott H., Jr.: Officer	Connecticut Savings Bank	Trustee.
Etherington, Edwin D.: Director	American Can Co. American Express Co. American Stock Exchange Automatic Data Processing, Inc. Connecticut General Life Insurance Co. Loctite Corp. Norton Co. United States Trust Co. of New York Ried and Riege, P. C. Woodbury Telephone Co.	Director. Do. Do. Do. Do. Do. Do. Counsel. Director.
Fagal, Frederick F.: Officer	CBT Corp.	Do.
Hansen, Carl N.: Director and Officer	Connecticut Bank & Trust Co. Middlesex Mutual Assurance Co.	Do. Do.
Huebner, Robert W.: Director and Officer	Bridgeport Hospital People's Savings Bank	Do. Trustee and Member executive committee.
Johnsen, Paul J.: Officer		
Gradwell, John D.: Officer		
Gustavson, Evald C.: Officer		
Koopman, Richard: Director	G. Fox & Co. Aetna Life & Casualty Co. Hartford Nat'l Bank & Trust Co. Mount Sinai Hospital Yale University Smyth Manufacturing Co. Tec. Group, Inc.	Vice chairman. Director. Do. Do. Professor. Director. Do.
Miller, John P.: Director	Campaign for Yale University Aetna Life & Casualty Co. Aetna Fund, Inc. Aetna Income Shares, Inc.	Chief executive officer. Director. Do. Do.
Monteith, Walter H., Jr.: Officer	Yale University	Professor.
McBean, Alan: Officer	Second New Haven Bank Connecticut Devel. Credit Corp.	Director. Do.

Officer or director: Title	Other corporate affiliations	Position
Nicklis, John O.: Director	Pitney-Bowes, Inc. Baldwin Gegenheimer Corp. Barnes Engineering Co. Stamford Water Co. State National Bank of Connecticut	Director. Do. Do. Do. Do.
Owens, O. Haydn, Jr.: Officer		
Paolella, Philip: Director	Plasticrete Corp. Life Insurance Co. of Connecticut New Haven Savings Bank Southern Connecticut Gas Co. St. Raphael's Hospital	President. Director. Do. Do. Do.
Pierce, Henry H., Jr.: Director	Northeast Bankcorp, Inc.	Chairman of the board, director.
Roberts, Henry R.: Director	Union Trust Co. Connecticut General Insurance Corp. Aetna Insurance Co. Connecticut General Life Insurance Co. Emhart Corp. General Foods Corp.	Do. President. Chairman of the board, director. President and director. Director. Do.
Sims, Ruth L.: Director	League of Women voters of the United States	Do.
Smith, Harold W., Director	First Federal Savings & Loan Association of Waterbury. Canadian International Power Co. Ltd. Colonial Bancorp Inc. Heminway Corp. United Corp. of Delaware United Investors Corp. of Conn.	Officer. Director. Do. Do. Do. Do.
Schlesinger, Irving H., Jr.: Officer		
Ulman, Lewis H.: Officer		
Van Sinderen, Alfred W.: Director and president.	Federal Reserve Bank of Boston. Stanley Works	Director. Director and member of the executive committee.
	United Aircraft Corp. Newington Children's Hospital	Do. Director and president.
von Auw, Alvin: Director	American Telephone & Telegraph Co. C & P Telephone Co. of Maryland	Vice president and assistant to chairman. Director.
SOUTHWESTERN BELL		
Acker, Ray A.: Officer		
Alston, Angus S.: Chairman of the board and director.	Alton Box Board Co. First National Bank in St. Louis First Union, Inc. General American Life Insurance Co. Mississippi River Corp. PepsiCo, Inc. St. Louis Union Trust Co.	Do. Do. Do. Do. Do. Do. Do.
Babler, Wayne E.: Officer		
Bailey, Louis C.: Officer and director	Boatmen's Bancshares, Inc. Boatmen's National Bank in St. Louis	Director. Do.
Barnes, Zane E.: President and director	St. Louis-San Francisco Railway First National Bank in St. Louis Pet, Inc.	Director. Member of the administrative board. Director.
Barron, Randall D.: Officer		
Bates, John W., Jr.: Director	First National Bank and Trust Co. of Tulsa Reading & Bates Offshore Drilling Co.	Director. Chairman of the board.
Bosold, Louis A.: Officer		
Bowen, W. Herbert, Jr.: Officer		
Bowles, Lloyd S.: Director	Allied Finance Co. Dallas Federal Savings & Loan Association Dallas Power & Light Co. Republic Financial Services, Inc. Republic National Bank of Dallas A. H. Belo Corp. (Dallas Morning News)	Director. Chairman of the board, president, chief executive officer. Director. Do. Do. Do.
Brookfield, Dutton: Director	American Can Co. First National Bank of Kansas City, Mo. First National Charter Corp. Interstate Brands Corp. Kansas City Power & Light Co. Northwestern Mutual Life Insurance Co. Unitog Co. Vendo Co.	Do. Do. Do. Do. Do. Trustee. President. Director.
Capps, George H.: Director	Alton Box Board Co. Boatmen's National Bank of St. Louis Capitol Coal & Coke Co. Capitol Land Co. General American Life Insurance Co. McDonnell Douglas Corp. Petrilite Corp. VICO Insurance Co. Volkswagen Mid-America, Inc.	Do. Do. President. Chairman. Director. Do. Do. Do. President.

Officer or director: Title	Other corporate affiliations	Position
Chambers, Maurice R.: Director	Angelica Corp.	Director.
	Anheuser-Busch, Inc.	Do.
	Dillard Department Stores, Inc.	Do.
	Emerson Electric Co.	Do.
	General American Life Insurance Co.	Do.
	General Steel Industries, Inc.	Do.
	INTERCO Inc.	Chemical board and chief executive officer.
	Laclede Gas Co.	Director.
	Mercantile Bancorporation	Do.
	Mercantile Trust Co, N.A.	Do.
	National Steel Corp.	Do.
	Seven-Up Co.	Do.
	Barnes Hospital	Do.
Clow, Stanley H.: Officer	First National Bank of Topeka	Do.
Frost, Tom C., Jr.: Director	D. Ansley Company, Inc.	Do.
	Elsinore Cattle Co.	Do.
	Farah Manufacturing	Do.
	Frost National Bank	Chairman of the board.
	Frost Bank Corp.	Do.
	Handy Andy, Inc.	Director.
	LaQuinta Motor Inns	Do.
Furr, Roy: Director	Caprock Shopping Center, Inc.	President.
	Crone Oil Co.	Do.
	Farm Pac. Kitchens, Inc.	Chairman of the board.
	First National Bank of Lubbock	Director.
	Furr's Cafeterias, Inc.	Chairman of the board.
	Furr's, Inc.	Do.
	Furr's, Realty Co.	Do.
	Lubbock Packing Co.	Do.
	Rore Realty Co.	President.
	Methodist Hospital	Director.
Gesley, Norman: Officer	Missouri State Bank and Trust Co.	Do.
Gravitt, T. O.: Officer	First National Bank in Dallas	Do.
	Metropolitan Loan and Savings Association	Do.
	Southwestern Life Insurance Co.	Do.
Haake, James F.: Officer	Capital Federal Savings	Do.
	Security Benefit Life	Do.
	Unitog	Do.
Hoverstock, Newton K.: Officer	Tenneco	Do.
Hoy, Justin E.: Officer		
Jones, Edwin S.: Director	Allied Bank International	Do.
	Alton Box Board Co.	Do.
	Angelica Corp.	Do.
	Federal Reserve Bank of St. Louis	Do.
	First National Bank in St. Louis	Chairman of the board and chief executive officer.
	First Union, Inc.	Chairman of the board and director.
	General American Life Insurance Co.	Director.
	General Steel Industries	Do.
	Interco Inc.	Do.
	McDonnell Douglas Corp.	Do.
	Pet, Inc.	Do.
	St. Louis Union Trust Co.	Member of the advisory board.
	Union Electric Co.	Director.
	VICO Corp.	Do.
Kibler, J. Byron: Officer		
Knight, Charles F.: Director	Emerson Electric Co.	Vice chairman and chief executive officer.
	First National Bank in St. Louis	Director and member of the advisory board.
	Miner Enterprises, Inc. Chicago	Director.
	Universal Castings Corp., Chicago	Do.
Martin, William W.: Director	First National Bank of Topeka	Do.
	Martin Tractor Co., Inc.	President.
	Martin Co., Inc.	Chairman of the board.
Nichols, James B.: Officer	Union National Bank	Director.
Ohlendorf, Harold F.: Director	Delta Products Co.	Director and officer.
	Farmers Gin Co., Inc.	Director.
	First National Bank, Osceola	Chairman of the board.
	First National Bank, West Memphis, Arkansas	Do.
	Osceola Memorial Hospital	Director.
	St. Louis-San Francisco Ry. Co.	Do.
	Chickasawda Hospital	Do.
	Midway Farms, Inc.	Do.
	Osceola Broadcasting Co.	Director and president.
	Ohlendorf Corp.	Director.
	Ohlendorf Farms	Owner.
	Ohlendorf Gin Co.	Director and president.
	Ohlendorf Investment Co.	Do.
	Ohlendorf Milling Co.	Do.

Officer or director: Title	Other corporate affiliations	Position
Owens, Cornelius W.: Director	St. Vincent's Hospital & Medical Center of New York	Director.
	Marine Midland Banks, Inc.	Do.
	New England Telephone & Telegraph Co.	Do.
	New York Stock Exchange	Public director.
	W. R. Grace & Co.	Director.
	American Telephone and Telegraph Co.	Executive vice president.
Parsons, John P., Jr.: Officer	Liberty National Bank & Trust Co.	Director.
Ransom, Harry H.: Director	University of Texas System	Chancellor emeritus.
Rogers, Doyle E.: Officer	St. Louis National Bank	Director.
	County National Bancorporation	Do.
	Corcan Equities Corp.	Do.
Schodde, Henry D.: Officer		
Shockley, R. Ray: Officer	First National Bank of Kansas City	Do.
	Bank of St. Louis	Do.
	General Bancshares Corp.	Do.
Smith, Don L.: Officer	Commerce Bank of Kansas City	Do.
Spicer, Ross H.: Officer	First City National Bank	Do.
Tellepsen, Howard T.: Director	Cardinal Construction Co.	Do.
	First Freeport Texas National Bank	Do.
	First Pasadena State Bank	Director and Vice Chairman
	Houston First Savings Association	Director
	Southwestern Life Insurance Co.	Do.
	Tellepsen Construction Co.	Chairman of the board of directors.
	Houston Citizens Bank & Trust Co.	Director.
	Tom Hicks Transfer Co.	Owner.
Thayer, Harold E.: Director	Alvey, Inc.	Director.
	American Air Filter Co., Inc.	Do.
	Carboline Co.	Do.
	Curlee Clothing Co.	Do.
	First National Bank in St. Louis	Do.
	First Union, Inc.	Do.
	General American Life Insurance Co.	Do.
	Laclede Gas Co.	Do.
	Mallinckrodt Chemical Works	Chairman of the board and chief executive officer.
	Missouri Pacific Railroad Co.	Director.
	St. Louis Union Trust Co.	Do.
	The Seven-Up Co.	Do.
	Barnes Hospital	Do.
Todd, Chester L.: Officer		
Trottmann, Stuart R., Jr.: Officer		
WESTERN ELECTRIC CO., INC.		
Accettura, Guy: Officer	Teletype Corp.	Director and chairman of executive committee.
Bergmann, Charles R.: Officer		
Bickmore, Lee S.: Director	Nabisco, Inc.	Do.
	International Educational Broadcasting Corp.	Director.
	Carrier Corp.	Do.
	Mutual Life Insurance Co. of New York	Do.
	Bankers Trust Co.	Do.
	Hart Schaffner & Marx	Do.
	Bankers Trust Co. of New York Corp.	Do.
Brown, John M.: Officer		
Burcham, Lester A.: Director	F. W. Woolworth Co.	Chairman and chief executive officer.
	Kinney Shoe Corp.	Director.
	F. W. Woolworth & Co., Ltd. (England)	Do.
	Charter New York Corp.	Do.
	Richman Brothers Co.	Do.
	F. W. Woolworth Co., Ltd. (Canada)	Do.
	F. W. Woolworth Co., S.A. de C.V. (Mexico)	Do.
	Woolworth Espanola, S.A. (Spain)	Do.
Chinlund, Daniel K.: Officer		
Doherty, James J., Jr.: Officer	Nassau Smelting & Refining Co., Inc.	Do.
Eckel, Eugene J.: Officer	Manufacturer's Junction Railway Co.	Do.
Ehinger, Robert F.: Officer		
Fick, Armin F.: Director and executive vice president.	Teletype Corp.	Do.
Fletcher, Stephan H.: Director and vice president and general contractor.	Western Electric Co., Ltd., London Teletype Corp.	Do.
Foster, Arthur G.: Officer	Nassau Smelting & Refining Co., Inc.	Do.
	United States Fidelity and Guaranty Co.	Do.
	F & G Life Insurance	Do.
	Johns Hopkins University	Trustee.
Garrett, David C., Jr.: Director	Delta Air Lines, Inc.	President.
	Travelers Corp.	Director.
	National Bank of Georgia	Do.

Officer or director: Title	Other corporate affiliations	Position
Gushman, John L.: Director	Anchor Hocking Corp.	Chairman of the board and chief executive officer.
	Gas Transport, Inc.	Chairman of the board.
	Anchor Cap & Closure Corp. of Canada, Ltd.	Do.
	F. W. Woolworth Co.	Director.
	Keyes Fibre Co.	Do.
	The Richman Brothers Co.	Do.
	National Ceter for Solid Waste Disposal, Inc.	Do.
	Huntington Bancshares Inc.	Do.
Harder, Howard C.: Director	CPC International, Inc.	Do.
	Otis Elevator Co.	Do.
	Carrier Corp.	Do.
	Associated Dry Goods Corp.	Do.
	Chemical Bank	Do.
	Chemical New York Corp (Holding Co.)	Do.
	United Jersey Banks (Holding Co.)	Do.
	Peoples Trust Co. of New Jersey	Do.
	Lord & Taylor	Do.
Hendrickson, Robert W.: Officer	Nassau Smelting & Refining Co., Inc.	Do.
Herbert, James S.: Director and executive vice president.	Sandia Corp.	Do.
Hogin, Philip E.: Director and executive vice president.	Teletype Corp.	Do.
	Phoenix Mutual Life Insurance Co.	Do.
	Sandia Corp.	Do.
	Phoenix Fund, Inc.	Do.
	Phoenix Capital Fund, Inc.	Do.
Hosford, James A.: Officer		
Kraay, Robert A.: Officer		
Kreps, Juanita M.: Director	New York Stock Exchange	Do.
	J. C. Penney Co. Inc.	Do.
	North Carolina National Bank Corp.	Do.
	North Carolina National Bank	Do.
Lawrence, John: Director	Dresser Industries, Inc.	Chairman of the board.
	Santa Fe Industries, Inc.	Director.
	Keebler Co.	Do.
	Federal Reserve Bank of Dallas	Chairman and director.
	National Life Ins. Co. of Vermont	Director.
Mehlhouse, Harvey G.: Director	Uniroyal, Inc.	Do.
	Allendale Mutual Insurance Co.	Do.
	Sycor, Inc.	Do.
Morgan, John A.: Director	Butler Manufacturing Co.	Chairman of the board.
	Commerce Bancshares, Inc.	Director.
	C. J. Patterson Co.	Do.
	Woolf Brothers	Do.
	Kansas City Association of Trust & Foundations.	Director and vice president.
Opdyke, William L.: Officer		
Ostrum, Dean G.: Officer		
Procknow, Donald E.: Director and president.	Bell Telephone Laboratories, Inc.	Director.
	Teletype Corp.	Do.
	Sandia Corp.	Do.
	J. P. Morgan & Co., Inc.	Do.
	Morgan Guaranty Trust Co.	Do.
	National Merit Scholarship Corp.	Do.
	CPC International, Inc.	Do.
	Ingersoll-Rand Co.	Do.
	Prudential Insurance Co. of America	Do.
Rettaliata, John T.: Director	Banco di Roma (Chicago)	Chairman of the board.
	Amsted Industries, Inc.	Director.
	Brunswick Corporation	Do.
	First Federal Savings & Loan Association of Chicago.	Do.
	Desoto, Inc.	Do.
	American Motorists Insurance Co.	Do.
	International Harvester Co.	Do.
	Lumbermans Mutual Casualty Co.	Do.
	Federal Mutual Insurance Co.	Do.
	American Manufacturers Mutual Insurance Co.	Do.
	Kemperco, Inc.	Do.
	Santa Fe Industries, Inc.	Do.
	Admiral Corp.	Do.
Sparks, Morgan: Officer	Sandia Laboratories	Director and officer.
Tanenbaum, Morris: Officer		
West, Joseph T.: Director and executive vice president.	Bell Telephone Laboratories, Inc.	Director.
	Teletype Corp.	Do.
	Sandia Corp.	Do.
Wiest, Quentin W.: Officer		
Zweier, Paul: Officer	Bell Telephone Laboratories, Inc.	Do.
Deuschle, Emil C.: Officer		
Hill, Harrell B.: Officer		

Officer or director: Title	Other corporate affiliations	Position
WISCONSIN TELEPHONE CO.		
Allis, John W.: Director.....	Marine Corp.....	Director.
	Marine National Exchange Bank.....	Do.
Briet, A. Thomas: Officer.....		
Christoph, John R.: Officer.....		
Cook, George V.: Director.....	American Telephone & Telegraph Co.....	Officer.
Falk, Harold F.: Director.....	Employers Insurance of Wausau.....	Director.
	Canal Street Corp.....	Officer.
	Heil Co.....	Director.
	Marshall-Isley Corp.....	Do.
	Northwestern Mutual Life Insurance Co.....	Trustee.
	Oilgear Co.....	Director.
	The Falk Corp. (Subsidiary of Sundstrand Corp.).	Chairman of the executive committee.
	Wisconsin Electric Power.....	Director.
	Kurtis R. Froedtert Memoria Luthern Hospital.	Do.
Ferguson, Robert W.: Director and officer..	College of St. Elizabeth.....	Do.
	St. Mary's Hospital, Milwaukee.....	Do.
Groh, Harold B.: Director.....	First Wisconsin Bankshares Corp.....	Do.
	First Wisconsin National Bank.....	Do.
	First Wisconsin Trust Co.....	Do.
Kassner, Milton A.: Officer.....		
Loving, Hamilton E.: Officer.....		
Mayer, Oscar G.: Director.....	Oscar Mayer & Co., Inc.....	Chairman of the executive committee.
	Northwestern Mutual Life Insurance.....	Trustee.
	Federal Reserve Bank of Chicago.....	Director.
Moede, Gustave H., Jr.: Director and president.	Milwaukee Children's Hospital.....	Do.
	First Wisconsin Bankshares.....	Do.
	Milwaukee Redevelopment Corp.....	Do.
	Oscar Mayer & Co.....	Do.
Nelson, David F.: Officer.....		
Packard, Howard Merrill: Director.....	Marshall Field & Co., Chicago.....	Do.
	Joseph, Schlitz Brewing Co.....	Do.
	Kemper Insurance Group, Chicago.....	Do.
	Universal Foods Corp., Milwaukee.....	Do.
	Heritage Bank, Milwaukee.....	Do.
	S. C. Johnson & Son, Inc. (Johnson Wax).....	Vice chairman.
	Federal Reserve Bank of Chicago.....	Do.
Ten Broek, Otto A.: Officer.....		
Tracy, Robert E.: Director.....	Tracy & Son Farms, Inc.....	President.

EXHIBIT 12.—A.T. & T. Memo Re Leasing Versus Ownership of Capital Assets

AMERICAN TELEPHONE & TELEGRAPH CO.,
New York, N.Y., January 20, 1971.

Subject: Leasing versus Ownership of Capital Assets.

To: Operating Vice Presidents and Comptrollers.

From: Vice President—Operations, Vice President—Construction Plans, Vice President—Service Costs, and Vice President and Comptroller.

Synopsis: Discusses the question of leasing versus ownership of capital assets, such as buildings, motor vehicles and equipment.

The question of leasing versus ownership of capital assets continues to confront the Bell System, especially during periods of projected high growth requiring large capital expenditures. Basically this question is of a financial nature and decisions to lease should be made only after thorough economic analysis.

Numerous economic studies have been made relating to the feasibility of leasing versus ownership of various capital assets and, as a general rule, ownership has been determined to be economically advantageous. Leasing is a valuable tool when dealing with temporary or unsettled conditions, but owning generally is economically preferable when the asset is to be retained throughout the major portion of its useful life. In the light of this experience, the following general guidelines have been developed and are offered for consideration:

1. *Buildings*—Equipment buildings should be owned except in very unusual circumstances. Headquarters buildings normally should be owned if occupancy is expected for a reasonable period of time or if expansion is contemplated. Garages, work centers, small headquarters buildings, space for remote TSPS switchboard installations, accounting centers, and business offices, etc. may be

appropriate for leasing where the permanence of the location, occupancy with other tenants, or urgent early requirements for space are factors.

2. *Motor Vehicles*—Motor vehicles should be owned except when leasing is justified by an economic analysis. Short term leasing and occasional rentals might be used for temporary peak demands.

3. *Equipment*—Equipment should be owned except for unusual conditions such as those relating to business machines.

The liabilities incurred as a result of entering into a financial lease are essentially equivalent in their nature to those incurred by outright purchase with debt financing. The lease commits the business to make a series of payments over a future period of time, and these promised payments are as much a fixed obligation as the interest and funding requirements of a debenture issue. The lease costs should be compared with cost of long term money which System companies can obtain from other sources, and such a comparison should include consideration of ability to refinance at more favorable interest rates, a privilege we usually provide for in debt securities offerings.

The Securities and Exchange Commission considers certain leases in the same light as debt. Under the registration requirements of the SEC, interest coverage is measured in terms which treat appropriate portions of rentals under long term leases as fixed charges. The SEC also requires the disclosure of leases in registration statements if the commitment is material in amount. The Accounting Principles Board of the American Institute of Certified Public Accountants in its Opinion No. 5 has specified that generally accepted accounting principles require that certain leases be reported on the balance sheet of the corporation as assets and liabilities. These financing aspects, together with the economic considerations, substantiate the need for close study prior to entering into any lease agreement.

It is recognized that the question of leasing versus ownership must be answered with respect to circumstances surrounding specific cases. It is possible to structure leases on various bases, some of which may be more economical than debt financing. Therefore, if a situation arises in which it would appear advantageous in your company to enter into a lease agreement that does not conform to the general guidelines expressed above, we would appreciate the opportunity of reviewing the economic and other considerations involved.

Should your people have any questions regarding the above, they may contact Mr. Lish's people (Mr. H. E. Crampton) on the matter of economic analysis. As to other considerations, Mr. Hunt's people (Mr. C. E. Bruggeman) are interested in leases for motor vehicles, garages and service centers, Mr. Cave's people (Mr. D. F. Jones) in large buildings and equipment and Mr. MacIntyre's people (Mr. R. A. White) in computer equipment. Mr. Mason's people (Mr. A. V. Plumley) are interested in the financial and accounting aspect of all leases.

EXHIBIT 13.—*Illinois Bell Memo Re Program To Detect Unauthorized Equipment*

MICHIGAN BELL,
Detroit, Mich., June 27, 1973.

To All MBT Employees:

You've probably seen some ads which may have puzzled you as much as they do many of our customers.

To me, the ads say that you can buy phones and just plug them in. That simply is not correct under tariffs filed with the Michigan Public Service Commission and Federal Communications Commission—and we want customers and employees to know that. We are sending customers a bill insert on this subject. And I want to remind you that the rules for Bell people are clear that employees may not make unauthorized installations and may not have unauthorized equipment.

Under the law we are required to enforce telephone tariff provisions. Those provisions prohibit the connection of unauthorized equipment by *anyone*. We're responsible for the quality of service our customers receive. Only by using properly installed and maintained equipment can we ensure this quality. We're also concerned over possible safety hazards to customers and employees from improperly installed or poorly wired equipment. Another reason we are concerned is that revenue is lost when customers connect unauthorized equipment and thereby obtain additional service without paying for it. This is not fair to other customers who are paying for service received.

For all these reasons, we're accelerating our program to detect unauthorized equipment. Customers' lines, including those of employees, will be checked to verify that a subscriber has the equipment that our records show he is paying for. Where the checks turn up a questionable situation, a premise visit will establish the facts.

If a customer has unauthorized equipment and refuses to comply with the tariff provisions, then it will be necessary for us to suspend phone service for that customer. If an employee has unauthorized equipment, then appropriate disciplinary action will be taken. I believe our customers and employees will continue to cooperate fully with this program because it is clearly in the interest of fairness to all concerned.

We are not going to condone the use of unauthorized equipment. We must be certain of the facts before we act, and we must act when we are certain. Only by our insistence on full compliance with tariff provisions can we honestly protect the quality of our service.

You will attend a meeting in the near future at which time you can ask any questions that you may have about this program.

Sincerely,

D. F. SMITH.



Pacific Telephone

COMPETITION ALERT

SPECIAL EMPLOYEE BULLETIN

SEPTEMBER, 1973

COMPETITION ALERT IS HERE!

Where will our competitors appear next? The car dealer? The motel across the street? Your favorite department store where a relative is employed? We don't know for sure - but you might!

We're asking for your help in preventing revenue losses to competition.

Many employees and their friends have been aware all along of business customers who were considering non-Pacific Company communications systems. Unfortunately, most employees never passed on this vital information simply because they didn't know how - or if they did, usually never found out the result of their sales lead.

That's all changed now thanks to the previously announced COMPETITION HOTLINE, as well as a brand new two-way reporting system called COMPETITION ALERT.

HERE'S HOW BOTH WORK . . .

1 COMPETITION HOT LINE . . .

As reported earlier in "The Weekly," a special toll free INWATS "Hotline" was recently installed at Competition Headquarters in San Francisco for use by all Northern Region employees. It was designed primarily so any employee could conveniently turn in any sales lead, no matter how insignificant it might seem. And at any time of day, too, since automatic answering sets provide 24 hour service.

To use, simply dial (800) 652-1090. (Or from coin phones or non DDD locations, place your Hotline call through your PT&T operator.)

COMPETITION HOT LINE (cont'd)

That's all there is to it. During normal business hours, a fellow PT&Ter will take down all pertinent information. If you call after normal business hours, just leave your name, city and telephone number. We'll get back to you as soon as possible.

Speaking of sales leads, here is a list of specific situations to watch for that would best help us

- Where customer comments about competition lead you to believe they are considering a non-Pacific Company system or service.
- Where you physically see or hear about competitive brochures, business cards, or letters in the hands of our customers.
- Where you observe a competitively marked truck or car at a specific customer's location.
- Leads on customer moves, additions, or changes where you feel competition will be making a contact. (Our competition often makes it a point to contact persons experiencing a change.)
- Leads on new growth — new construction.
- Information from friends and relatives about competitive activity.

To help you remember the Competition Hotline number, we've attached a calendar card for your purse or wallet with a memory-jogger of the above situations to watch for, as well as an easily-removed Hotline sticker for your telephone or Company car dashboard.

2 COMPETITION ALERT

To further help meet the competition more effectively, we've added COMPETITION ALERT, a two-way reporting system that will alert our managers about business customers who are presently considering service from competition. Periodically, these select managers in the Northern Region will receive a copy of COMPETITION ALERT, which will list those customers. Managers should, in turn discuss this information with their employees. And any information which could be helpful in preventing a lost customer should be reported IMMEDIATELY to COMPETITION HEADQUARTERS via the HOTLINE.

And we make two promises: One — your lead will be acted upon immediately, and, two — you'll be notified of the results as soon as possible

So please call with your information

REMEMBER . . .

Competition is Everyone's Business

COMPETITION ALERT

THE BUSINESS CUSTOMERS LISTED BELOW ARE CONSIDERING OBTAINING THEIR COMMUNICATIONS EQUIPMENT FROM NON-PACIFIC COMPANY VENDORS. IF THESE CUSTOMERS DECIDE AGAINST US, PACIFIC TELEPHONE STANDS TO LOSE CONSIDERABLE REVENUES FROM THESE DECISIONS. IF YOU CAN HELP OR PROVIDE INFORMATION THAT WOULD BE HELPFUL IN SAVING THESE CUSTOMERS, **PLEASE CALL** **COMPETITION HOT LINE** FROM ANYWHERE AT NO CHARGE.

(800) 652-1090

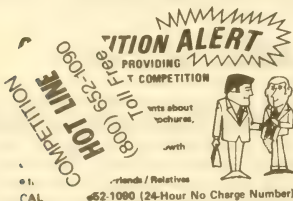
CUSTOMER _____
CITY _____

CALL AT NO CHARGE . . . (800) 652-1090

DATE _____

PACIFIC TELEPHONE PROPRIETARY INFORMATION. REPRODUCTION OR OUTSIDE DISTRIBUTION FORBIDDEN.

**COMPETITION ALERT
BULLETIN TO BE
DISTRIBUTED TO
SELECT
MANAGEMENT
PERSONNEL**



**POCKET
CALENDAR
CARD AND
DASH BOARD
OR TELEPHONE
STICKER**

COMPETITION -

IS EVERYONE'S BUSINESS!

212 658-9948

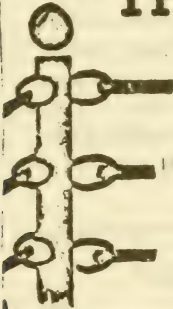
ALERT



RED

WHEN YOU SEE OR
HEAR SOME OF THE
POSSIBLE LOSS TO
COMPETITION DANGER
SIGNALS, CALL THIS
NUMBER IMMEDIATELY!

THE BIG FIGHT!



New York Telephone

VERSUS

Brand X

..... the arena is all lit-up and the contestants are ready to square off..... the "Old Pro" versus the relative new-comer! The new-comer is hungry, well-honed and always shooting for the quick knock-out! But the "Old Pro" has a lot going for him too; experience, a good manager, backers and lots of loyal fans. And he's in terrific shape to do battle, for a few short rounds, or the full distance. However, he can use a little help in his corner both before or during the contest. Also, it would be well to remember that he can't hold his own in the ring with an opponent if everytime he goes back to his corner he gets into a hassle with his own people! And if the people behind the "man-out-front" get in the habit of spotting the competitive danger-signals as they appear, and do something about it, they can give the "Old Pro" that little competitive edge that will enable him to anticipate sneak punches, illegal blows, counter punches or just good clean shots that may hurt. And the "Old Pro" is not about to retire..... far from it! Instead he's about to emerge as a new heavyweight knock-out threat! But he can't do it without our help.

"CATALYST FOR FURTHER ACTION!"

(over)

EXHIBIT 14.—A.T. & T. Letter to Mr. Ricks Re Policy on Selling Equipment to Outside Parties

AMERICAN TELEPHONE & TELEGRAPH Co.,
New York, N.Y., March 26, 1971.

Mr. JAY E. RICKS,
Hogan & Hartson,
Washington, D.C.

DEAR JAY: This is in response to your letter of March 19, 1971, which enclosed copies of correspondence between your client and Mr. Griffith and Mr. Springer and the Illinois Bell Telephone Company. It is important to note that the Bell operating companies are not in the supply business, and normally would not sell equipments, materials, or supplies to outside parties. However, in the case of internal wiring and other associated plant facilities where it may be decided to sell, it was felt that a uniform approach throughout the Bell System might be desirable, although certainly not mandatory, because many of the parties involved in these situations have nationwide interests. Guidelines were, therefore, suggested to the Bell operating companies that the asking price for such facilities should be determined in accordance with structural value. This would ordinarily be reproduction cost new, determined or estimated on the basis of equipment, material, and installation cost, less the allowance for the physical and functional depreciation which may have occurred in the plant offered for sale.

I trust this adequately answers your question.

Very truly yours,

RAYMOND F. BURKE.

Enclosure :

MEMORANDUM

Sales of terminal wiring, associated connecting blocks and terminal strips occur sporadically and relatively infrequently when a customer chooses to convert his telephone service. For example, the conversion typically is from private branch exchange (PBX) service wholly provided by the telephone company to a service whereby the telephone company provides only private branch exchange access trunks and connecting arrangements and the customer provides his own on-premises communications system or equipment. Presently, such sales are not solicited. They are made solely for the accommodation of the customers who request them. A question has been presented as to whether these sales are within the purview of Section 214 of the Communications Act of 1934, as amended.

To sell terminal wire and associated terminal equipment installed within a customer occupied building is not, we believe, to "discontinue . . . service to a community, or part of a community" within the meaning of Section 214 of the Act. Such sales, when they do occur, do not result in the discontinuance of service. Rather, the result is merely a change in the manner of providing service. As viewed by the customer, he will be obtaining the same type of service after the sale as before, albeit he or others will then be providing a portion of the equipment needed therefor. As viewed by the carrier, the type of service (and related responsibilities) have changed: nevertheless service continues to be rendered by the carrier to that customer. At most, the sale may be conceived to affect the *means* of rendering service to a customer. In fact, the final proviso to Section 214(a), which also precludes the need for a discontinuance certificate in such cases, reflects this interpretation. That provision provides in pertinent part that nothing in Section 214(a) "shall be construed to require a certificate or other authorization from the Commission for any installation, replacement, or other changes in plant, operation, or equipment, other than new construction, which will not impair the adequacy or quality of service provided."

A discontinuance of service to a community or part of a community implies an abandonment or withdrawal, thereby depriving the public (the community) of service which it has theretofore enjoyed. That clearly is not the case presented here. What occurs in this instance is closely akin to what occurs when a particular customer cancels his service and the carrier for various reasons decides to dismantle the terminal facilities which were used to provide that service. The telephone company's tariff for rendering service to that customer, and all other customers, remains in effect. Such company holds itself out to

the public as ready to provide, upon reasonable notice, the service which was rendered prior to the customer's requested change just as fully as if that particular customer had not previously taken service. Quite simply, there is no discontinuance of service while a tariff offering the service is in effect and the carrier stands ready and able to provide such service. *McGrody v. Baltimore & O. R.R.*, 217 F. Supp. 252 (1963).

The legislative history supports the foregoing conclusions. The amendment to Section 214 relating to the discontinuance of service by a carrier was added during a period when our country was at war. Congress quite properly expressed its concern over discontinuance of service as it might affect the military effort. Nonetheless, it is equally clear that the Congress was concerned with the discontinuance of service to a community as opposed to the abandonment of a particular line. Indeed, the initially proposed amendment to Section 214 (based on Section 1(18) of the Interstate Commerce Act (required that "no carrier shall abandon all or any portion of a line, unless and until there shall first have been obtained from the Commission a certificate" of public convenience and necessity. See, S. 2445, 77th Cong., 2d Sess. (introduced April 9, 1942)). Thereafter, in hearings it was pointed out that no purpose would be served by requiring certification for the abandonment of a communication line, for in communications there could be an abandonment of a communications line with no impairment of service to a community. Hence the provision was revised to require certification only for discontinuance of service to a community or part of a community.* Accordingly, for these as well as other reasons, it must be concluded that the sale of terminal wire in the cases described are within neither the letter nor the intent of the discontinuance clause of Section 214.

In view of the foregoing, it seems clear that the Commission's ruling in the *Warrensburg Cable* case (27 F.C.C. 2d 727 (1971)) is inapposite. In the *Warrensburg Cable* case, it appears that United or its affiliate sold *all* their CATV channel facilities in the community of Warrensburg to the Harrisclope Broadcasting Corporation. Factually, there is no parallelism when terminal wire is sold by a carrier to a particular customer at his request, and the carrier continues to provide service to that customer, and no others are adversely affected.

In any event these sales of terminal wire seem to present transactions with which the Commission should not concern itself as a practical matter. No apparent public interest would be served by the costly and burdensome task of filing for such discontinuance certificates even assuming, *arguendo*, that such interpretation could be given to Section 214. This situation again presents a matter where the rationale set forth by the Commission in its Final Decision and Order in Docket 16979 at para. 31 is appropriate. Therein the Commission stated "We believe that we are granted discretionary latitude, under the Communications Act and relevant judicial interpretation thereof, to refrain from subjecting a marginal activity to our regulatory process where it is clear that the public interest will be served by such a course."

EXHIBIT 15.—*Letter From W. H. Springer to FCC Re Sale Price of Existing Telephone Facilities in Chicago*

February 19, 1971.

MR. KELLEY E. GRIFFITH,
Chief, Domestic Rates Division,
Federal Communications Commission,
Washington, D.C.

DEAR MR. GRIFFITH: This refers to your letter of January 7, 1971, Reference 9310, which enclosed a copy of a letter the Commission received from Mr. Thomas A. McGowan of Arcata Communications, Inc. Mr. McGowan's letter

* Hearings on S. 2445 before the Senate Subcommittee of the Committee on Interstate Commerce, 71-75, 103, 248 (1942); Hearings on S. 2598 before a Subcommittee of the House Committee on Interstate and Foreign Commerce, 42-44, 51-53, 71-73 (1942); H. Rep. No. 2664 77th Cong., 2d Sess. 11 (to accompany S. 2598) (1943); S. 158, 78th Cong., 1st Sess., introduced Jan. 7, 1943; S. Rep. No. 1,3, 78th Cong., 1st Sess. 1 (1943); H. Rep. No. 69, 78th Cong., 1st Sess. 10 (to accompany S. 158) (1943); H. Rep. No. 142, 78th Cong., 1st Sess. 14 (Conference Report to accompany S. 158) (1943); 89 Cong. Rec. 777, 786-87 (1943).

concerns the sale price set by our company for certain existing telephone facilities located in a building in Chicago.

The sale of the plant facilities in question was initiated in response to a specific request by our subscriber, Corbett Clinic. The sale price of \$1,435.00 was determined on the basis of the value of such plant. Basically, this amounts to the estimated reproduction cost new, including installation, less an allowance for the physical and functional depreciation which may have occurred.

The procedures used in computing these charges were in accordance with guidelines set forth by the American Telephone and Telegraph Company which were recommended to all Associated Bell System Companies in March of 1970. If you have any questions regarding these systemwide procedures we have been advised that representatives of the American Company will be pleased to discuss them with you at your convenience.

We believe that the quoted sale price is fair and equitable to all parties concerned.

Very truly yours,

W. H. SPRINGER,
Vice President.

EXHIBIT 16.—*Letter from Mr. McKersie Re Michigan Bell's Denial Regarding Acts of Reciprocity Involving TPI and Van Ess Co.*

TPI, Inc.,
Grand Rapids, Mich., July 25, 1974.

MR. GERALD HELLERMAN,
Special Financial Adviser, Antitrust and Monopoly Subcommittee, U.S. Senate, Washington, D.C.

DEAR MR. HELLERMAN: This is in response to Mr. Ron Fox's testimony at the Senate hearings and the subsequent denial by Michigan Bell regarding their act of reciprocity involving TPI, incorporated and Van Ess Company in Grand Rapids, Michigan.

In June 1972, I met with my salesman, Mr. Roger W. Goossen and Mr. Russell Kniff, Treasurer of Van Ess Company in Mr. Kniff's office. The meeting was held at Mr. Kniff's request for the purpose of determining what action TPI was going to take since Van Ess wanted to cancel our contract to install a new telephone system for them.

Mr. Kniff explained to me that they had agreed, previously, to buy their new telephone system on the merits of economics. However, after they signed the contract, they were contacted by the Michigan Bell Telephone Company and informed that they probably would not receive any more construction work from Bell because they chose to buy telephones from their competition. Mr. Kniff would not say who had called from Michigan Bell.

Because over 30% and approximately \$350,000 of business was involved. Mr. Kniff felt he could not justify the rather insignificant savings from owning his own telephone system at the sacrifice of losing so much work from Bell.

I personally assured Mr. Kniff that it was not our intent to put any customer in that kind of predicament and that TPI would not attempt to enforce the validity of our contract. He was very grateful and offered to intercede on our behalf in selling a system to their Florida office if we had maintenance capability in that area.

After we left Mr. Kniff's office, I called Mr. E. F. Gietzen, district Marketing Manager for Michigan Bell in Grand Rapids to complain about this act of reciprocity. Mr. Gietzen assured me he would investigate and get back to me as soon as possible.

Within a few days Mr. Gietzen called me and advised me that although it was not their policy, this incident did in fact take place and that Mr. Gerald J. Tillema, district Plant Manager, was the telephone employee involved. Mr. Gietzen apologized and advised me that it would not happen again.

If you require any further details, please do not hesitate to call on me.

Sincerely,

DONALD V. MCKERSIE,
President.

EXHIBIT 17.—*Affidavits of Mr. Gietzen and Mr. Tillema Re Cancellation of Van Ess Co. Contract With TPI*

AFFIDAVIT

STATE OF MICHIGAN,
County of Kent, ss:

NOW COMES, Elmer F. Gietzen and, being first duly sworn deposes and says:

1. That he is District Sales Manager—Grand Rapids for Michigan Bell Telephone Company.

2. That he has read a copy of a letter dated July 25, 1974 from Mr. Donald V. McKersie, President of TPI, Incorporated to Mr. Gerald Hellerman, Special Financial Adviser, Anti-Trust and Monopoly Sub-Committee United States Senate, which letter was introduced into the record during hearings before the Sub-Committee on July 30, 1974.

3. That said letter refers to two telephone conversations between Mr. McKersie and himself regarding the cancellation by the Van Ess Company of Grand Rapids of a contract for a telephone system with TPI, Incorporated.

4. That the facts regarding those two conversations are:

(a) That sometime in June of 1972 he received a call from Mr. McKersie informing him that the Van Ess Company had cancelled its contract with TPI after a Michigan Bell Telephone Company Construction Department employee had talked to Mr. Russell Kniff, Treasurer of the Van Ess Company;

(b) That upon inquiry he learned Mr. Gerald J. Tillema, District Construction Manager, had had a recent conversation with Mr. Kniff during which the subject of the possibility of the Van Ess Company purchasing its own telephone system had been discussed;

(c) That he discussed this conversation with Mr. Tillema, who advised him that Mr. Kniff had indicated at that time that the Van Ess Company did not have a contract with TPI and that he (Mr. Kniff) had been led to believe that Michigan Bell did not care whether customers purchased private telephone systems and was principally interested in supplying Central Office lines, and that, in response to Mr. Kniff, Mr. Tillema had replied that Michigan Bell "did care" and had stated "We consider all our services revenue producing";

(d) That Deponent then called Mr. McKersie, advised him of the facts as set forth above and apologized for the fact that the discussion had occurred after a contract had been signed even though Mr. Tillema had understood that there was no contract. At that time Mr. McKersie stated that while TPI did have a signed contract, he did not intend to force the issue.

4. That at no time in his conversations with Mr. McKersie did Deponent indicate that he had found that Mr. Tillema had made any threat to withdraw Michigan Bell business, nor did he apologize for any such threat, as Mr. McKersie's letter implies.

Further deponent sayeth not.

ELMER F. GIETZEN.

Subscribed and sworn to before me this 14th day of August, Notary Public for Kent County, Carol A. Skelton.

My commission expires May 25, 1976.

AFFIDAVIT

STATE OF MICHIGAN
County of Kent, ss:

NOW COMES, Gerald J. Tillema and, being first duly sworn, deposes and says:

1. That he is District Construction Manager—Grand Rapids for Michigan Bell Telephone Company.

2. That sometime in June of 1972 he had a telephone conversation with Mr. Russell Kniff, Treasurer of the Van Ess Company, Grand Rapids, Michigan, regarding the possibility of the Van Ess Company contracting for telephone equipment with TPI, Incorporated.

3. That the substance of that conversation was as follows:

(a) He asked Mr. Kniff if a formal contract had been signed and Mr. Kniff said "No," but that they were considering it.

(b) Mr. Kniff asked why he was concerned, and he stated that the telephone company, like any other company, was concerned about loss of business.

(c) Mr. Kniff said that he did not realize that Michigan Bell put much value on "office type" equipment and that he thought Michigan Bell cared more about Central Office lines, to which Deponent responded that "Michigan Bell considers all its services revenue producing."

3. That he made no threat, direct or indirect, that Michigan Bell would withdraw its business from the Van Ess Company if it purchased telephone equipment from TPI.

4. That shortly thereafter he was asked about this conversation by Mr. E. F. Gietzen, District Sales Manager—Grand Rapids for Michigan Bell Telephone Company, at which time he advised Mr. Gietzen of the facts essentially as set forth above.

Further deponent sayeth not.

GERALD J. TILLEMA.

Subscribed and sworn to before me this 14th day of August, 1974, Notary Public for Kent County Carol A. Shelton.

My commission expires May 25, 1976.

AFTERNOON SESSION

Senator HART. The committee will be in order.

This afternoon we will receive the testimony of Mr. Robert L. Feiner.

STATEMENT OF ROBERT L. FEINER, PRESIDENT, PHONETELE, INC., VAN NUYS, CALIF.

Senator HART. As was the case this morning, let me order printed in the record your entire statement and its attachments. You may proceed as you want.

[Mr. Feiner's prepared statement appears as exhibit 1 at the end of his testimony.]

Mr. FEINER. I am Robert L. Feiner, president and the founder of Phonetele, Inc., of Van Nuys, Calif.

We conceived, prototyped, designed, and presently sell, manufacture, and maintain a piece of equipment known as the Phonemaster which is a special purpose mini-computer of solid state configuration that attaches to the telephone facility of the customer for the purpose of reducing the usage portion of his telephone bill.

Bearing in mind that the telephone bill is approximately one-third hardware and two-thirds usage, we address the usage portion of that bill; and that is what sets us aside from most other interconnect companies competing with the telephone company.

The equipment monitors the outgoing telephone calls by looking at the first three digits dialed, and in many cases the first six digits dialed, and will thereafter allow or disallow those calls, determining whether or not they are placed on the proper outgoing trunks. Our equipment will program any number of types of trunk groups such as tie lines, WATS lines, and foreign exchange trunks.

A rather dramatic example of the application of our equipment is contained in an exhibit that I have submitted, which exhibit is a reprint of an article done by a leading telecommunications journal, which relates the story of how a \$50,000 Phonemaster system installed at the Los Angeles County U.S.C. Medical Center saved that county \$30,000 per month.

[See attachments to exhibit 1 at the end of Mr. Feiner's oral testimony.]

Mr. FEINER. Therefore, the Phonemaster was paid for by savings in approximately 50 days of use.

As the article will relate, the telephone company had one type of trunk group, just local trunks; with the availability of our equipment they were able to analyze their telephone usage as to the volume of calls, the locale of calls; and thereafter added seven foreign exchange trunk groups to embrace the Los Angeles calling area.

After paying those additional trunk charges their multimessage unit charges dropped by a net \$13,000 per month.

Prior to that time the multimessage unit bill was \$43,000. Therefore, that drop represents approximately, a 38-percent drop in their multimessage unit charges.

I might add to that that those multimessage unit charges presumably are somewhat cost related; and thereby, they also affected, one can presume, an approximate 38-percent reduction in the burden on the central office equipment of the telephone company.

If we look at approximate rates of return, we might say on the \$13,000 per month, the telephone company might have netted \$1,000 and saved \$12,000 in costs. In fact, in order to gain that thousand dollars it cost the county of Los Angeles \$13,000.

In addition to that \$13,000 a month savings the equipment was able to foreclose the accessibility to the telephone system some 3,500 instruments, to unauthorized callers who were incurring an additional \$17,000 per month in unauthorized long distance calls. That coupled with the \$13,000 a month in multimessage units charges is \$30,000.

Along with that article is another article that I paid for and put in that same publication which is a rather scathing indictment of the practice of the telephone company allowing this type of thing to happen.

Please bear in mind it is, and has been, the marketing practices of the telephone utilities to provide such restriction equipment as the Phonemaster, or its ilk, on a demand basis only.

Therefore, the telephone company has wrongfully and willfully, and in my view, by its stated policy failed to adequately develop the type of hardware that would be necessary to effect these type of savings to the subscribers, because in fact it has been their policy to allow free access to the network, lest their total network charges be reduced.

I think this is unconscionable. I believe the carriers have incurred a substantial liability to the telephone subscribers that could take the form of a class action lawsuit for rebate of all misuse that has been incurred over past x number of years since this technology has been available; 5 years, 7 years, or something of that time.

Bear in mind that the telephone company in this particular instance did not have anything they could offer. It was not possible—there was no room in the telephone equipment room. The equipment they do offer is old, archiac technology.

In fact, a Phonemaster, which is 3-foot long and 1-foot deep and 1-foot high, two such cabinets have in one particular situation—

by comparison—could only have been replaced by telephone company equipment that would stand 7 feet tall, 3 feet wide, 18 inches deep multiplied by seven. Their equipment takes approximately eight times the physical space that our equipment takes.

Of course, it cannot be programed in the way our quipment can be programed. In many, many instances we displaced the telephone company's equipment.

Most regrettably, the telephone company has never offered this type of service to key telephone system users, only to essentially large PABX users.

Therefore, we can see the background of why the telephone company, in my view, has so vigorously opposed the entry of Phonetele into the interconnect business. This began in the latter part of 1969, over 4 years ago with the nonavailability of connecting arrangements where we were not actually able to connect to the telephone network.

I don't want to tire this group by going through a long history of the regulatory problems before the Public Utilities Commission of the State of California, which I personally handled for the company, all the way up to the point that I finally hired the services of a most competent lawyer who took a most unsatisfactory PUC decision, took it by writ to the California Supreme Court, which was granted.

The case was decided on April 8 of this year. The California Supreme Court rendered a decision to Phonetele, 7 to 0, annulling the contested order, and handed down a decision we think is landmark in character and certainly 100 percent to our satisfaction.

Essentially what the California court said, or reaffirmed, was that the burden to show a harm is on the telephone utility. Essentially they had not met that burden.

They allow the telephone company to continue to provide this protective-type arrangement without charge to our customers. There are only two conditions that can cause that to change:

One is that the court has opened the way for the commission, should it so desire, to hold further evidentiary hearings to try to prove that the Phonemaster is harmful.

I might point out that that would be a fruitless way for the PUC to go because the Phonemaster is already certified according to the interim criteria that has been published by the PUC staff that is now pending before that commission for certification and adoption.

The second thing that can change that court decision is, in fact, the adoption of a certification program. Whether or not that would be forthcoming in the State of California, at this time, I am quite candidly uncertain. I, personally, am deeply involved in that proceeding.

I have skipped over the history of those number of years, but I will point out, as I have in my prepared statement, that the connecting arrangements were horrendously obstructive and costly to us. They were defective, creating a great deal of aggravation to our customers and ourselves.

Inasmuch as we have been absorbing the cost of those connecting

arrangements, or the impending threat that our customers at any time might have to pay those charges, we essentially, in our pricing structure of the Phonemaster, absorbed them.

Therefore, as a result of the California Supreme Court decision we are able now to increase our price by approximately 20 percent without effecting any change in that cost to the end user.

Phonetele is a small company, and we have done about \$1½ million to date. I would point out that that amounts to \$300,000 of revenue, which, as you can see for a small company, is a very substantial amount of money.

The dramatic part of the story comes, in fact, that for over 4 years Phonetele has not been able to market this equipment outside the State of California to the end subscriber. I have documented here now that as early as February of 1970 we had contact with A.T. & T.; even prior to that date, telephone conversations with Mr. D. H. Harrison, the responsible engineer for connecting arrangements.

In early December of 1970 there was an engineering meeting between an A.T. & T. engineer and a Pacific Telephone engineer for the express purpose, as stated on the record in the Phonetele transcripts of the hearings before the commission, to develop a Bell System connecting arrangement.

The bottom line is that it was not until March of this year that that hardware was for the first time available to us outside the State of California. Pointing out also that the connecting arrangements used by Pacific in California were not available to us outside the State of California, per the statements in the minutes of the meetings we had contained in these exhibits.

When they were available for our first customer outside the State of California, the New York Times, they were available at a cost of \$6.25 a month per trunk compared to the \$1.80 per month charge that Pacific Telephone wanted in California.

Therefore, one could presume that in California, had we not won before the court, we would have been burdened by a substantial increase in those connecting rate charges which would have had the economic effect of proscribing our ability to market our equipment in California in the future, as it now proscribes our ability to market outside the State of California.

The connecting arrangements at the New York Times, a 150-trunk system, cost \$4,500 to install, versus an installation charge of the Phonemaster of \$3,687. The monthly charges at the New York Times are \$937.50 compared to a comparable 5-year lease cost of the Phonemaster of \$848.

In other words, the connecting rate costs more than our equipment.

By quick extrapolation it would suggest the \$40,000 system we sold them we could have sold in fact for \$90,000, because the estimates that were given to me by The New York Times suggest they were going to pay for that equipment in something less than one-half a year.

Now, it is one thing that Phonetele is foreclosed from marketing equipment and doing business outside the State of California for a

period of over 4 years to this very date by this de facto prescription but another thing is that the telephone subscriber is not being afforded the opportunity to obtain this type of equipment for which they have a demonstrable need. And bear in mind along with that that the telephone utilities do not offer any type of comparable equipment that does anywhere near the effective job this does, nor do they offer anything for key telephone systems. That is the fact today. That is not rhetoric. It is documented. It is on the record and I challenge anybody to refute it.

Now, for all this period of time, as earlier testimony has indicated, telephone utilities have been fighting competition in quite a vigorous manner. There are essentially two arguments they have been using.

The first is the issue of network harm. Now, I think that the concern the telephone utilities have about network harm is a valid one. I believe that a properly constituted certification program would certainly enable equipment to be attached to the telephone network with reasonable safety without harming the telephone network. Of course, the telephone utilities have taken a hard-line stance against certification.

They have not been able to prove that in our case, though, for 3½ years. They certainly have not proved it to the satisfaction of the California Supreme Court.

Again, here I have a page taken out of a document called "Interconnection," dated 1973, that was set before the executive planning committee of A.T. & T.—the executive planning committee consists of the Bell System Co. presidents—where they admit the inability to demonstrate harm to the network due to customer-provided equipment.

It is also interesting to note, specifically in the California case that is ongoing now on certification, testimony was submitted by Pacific Telephone engineers for the first time outlining purported harm by customer equipment through the trouble reports they have had. None of those trouble reports indicate any problems with the Phonemaster.

So in my view the issue of network harm as it pertains to the Phonemaster, and I believe to other equipment, and their concerns about the viability of a certification program, I believe, are false arguments.

Now, they know they are losing that argument. They have come up with another one. They talk about the impact on residential telephone subscribers. I think it is a brilliant argument, a very, very effective argument; but I think what the telephone utilities are doing is taking the telephone subscriber and holding a knife to his throat and saying to the regulatory agencies, "Unless you do it our way, we will slit his throat."

I would point out the comment of the U.S. Department of Justice in their filing in the North Carolina case spoken of earlier where they said:

There is no reason for believing that allowing the interconnection of customer-supplied equipment would have an adverse impact on residential rates.

In California, the public utilities commission, when it issued its order instituting investigation into certification, case 9625, said:

It may be argued that to allow direct interconnection of customer-provided equipment in lieu of that equipment furnished by the telephone utility will disturb the revenues of the regulating companies. If such a result should occur there are sufficient procedural remedies available to insure that rates for services by utilities are properly and reasonably maintained.

I would point out that as that case ground down over some months, the CPUC, because of the participation, I presume, of Commissioner Symon of the State commission, rescinded that wording and in fact has now opened up that particular case to embrace economic impact arguments as well.

Further on that point, Phonetele participated in the NARUC hearings; and in its report after investigation, issued on May 14, 1974, the prefacing remarks of that report stated, " * * * under present regulatory practices * * *" and went on to allege the fact that residential rates will rise due to competition. I don't believe this argument.

Now, we are going to go around for another 2 or 3 years arguing about the residential subscriber and getting him all worked up.

I want to get down to what I think the real issues are. There are two other areas. When docket 20003 was issued by the FCC, which is an inquiry into the economic impact of competition with the telephone utilities, it raised the question about what is a natural monopoly.

Let me just say that I think economic inquiries are important and I think they should be conducted because I think it is important to understand the dislocations that may occur due to competition. I do not think it is proper in the sense of trying to outlaw or emasculate interconnection competition.

It asked the question of what is a natural monopoly. I did a little research and I have submitted here a copy of an exhibit that I submitted, in testimony that I prepared, for the ongoing case in California. The UCLA School of Business library had over 40 texts that I went through. Does the telephone utility indeed have a natural monopoly over the customer equipment portion of the business?

Not by the wildest stretch of the imagination, all the way back to the writings of John Stuart Mill, who first observed the concept of natural monopolies applying, not to the end product where the customer has it in his premises, but to the impracticality of having, for example, five competing utility companies laying those utility lines in the streets, serving every fifth customer. Because of severe physical limitations, it was in the public interest to allow only one such line to serve all customers regulated. Nowhere in economic thinking or citations to legal cases was there the slightest hint or suggestion that the customer equipment aspect of the telephone business could be a natural monopoly.

It is very clear from that research that that which is not a natural monopoly is a pure garden variety type monopoly, an unlawful monopoly.

Therefore in my clear view from everything I have read, the telephone utilities at the present time hold an unlawful monopoly of

the customer equipment business in violation of the existing anti-trust law.

Now that is contrary to the allegations of Mr. DeButts, the chairman of A.T. & T., and Mr. Lilly, the president of A.T. & T., in the instance of alleging the fact they do have a natural monopoly. I would point out the fact natural is not an adjective in this term. It is a noun.

What you are dealing with here now is not only the fact that there is an unlawful monopoly, but you are interfering with the basic right so fundamental to this country that each and every person, individually, should have the free and unfettered right to determine what type of telephone equipment best suits his purposes without the interference of legislators, regulators, courts, or the telephone utility so long as the use of that equipment on the telephone network is not physically harmful either to individuals or the telephone network itself, which is something that there are adequate safeguards to achieve.

That is more basic—their right to make that free choice—than the question of whether or not there is a monopoly involved here.

I don't think there is anybody that can suggest that monopoly competition is not going to cause the telephone company to get off their rear ends and do what they think is a fantastic job in trying to serve the public interest.

Now there is another area that I think is the real issue. Not harm to the residential subscriber, not harm to the network—and yes, they may try to use natural monopoly to support those arguments—but, gentlemen, it comes down to one basic thing. It is a business judgment revolving around earnings. It is interesting in this testimony.

I did a cursory analysis. I presented it to you exactly as it is in my prepared testimony before the California Commission. It is a cursory analysis.

[The analysis referred to appears as an attachment to exhibit 1.]

Mr. FEINER. Take a look at the 14 years of earnings per share record of A.T. & T. and you will see the increase in earnings per share lagged the increase in revenues by a negative 1.63 percent.

It was not until 1973 that that finally turned around. In the testimony before the California Commission that has been submitted it is stated that the revenues of PBX and key systems—the 1973 revenues—that are vulnerable to interconnection competition amounted to \$250 million.

NARUC, in its report after investigation, and I have submitted an exhibit, has estimated by 1984 how much of the market will be for key systems and PBX installations and what percentage of those markets would be a minimum projected interconnection penetration, extrapolating from those numbers—and you can follow my tracking in there, how I calculated that—it comes back to show that the \$250 million revenue of Pacific Telephone at the present time is vulnerable to the extent of \$66 million, gross revenue.

[See attachments to exhibit 1 at the end of Mr. Feiner's testimony.]

Mr. FEINER. In consulting with Mr. Paul Popenoe of the California Public Utility Commission staff, who was involved in the NARUC report, investigation into this economic impact question, he estimated that the net aftertaxes bottom line to that could be as high as 25 percent. Therefore, I extrapolated that the 1973 earnings were threatened by a net aftertax amount of about \$16.5 million. This set against their net earnings for the 1973 annual report shows that their 1973 earnings were vulnerable to a 7.65 percent impact.

Now Pacific being one-tenth of A.T. & T., you can extrapolate from that and say all right, A.T. & T.'s earnings thereby are affected by that same 7.65 percent. In other words, the 1.63 percent negative increase in earnings will be further impacted by 7.65 negative impact due to interconnection competition, $4\frac{1}{2}$ times. That means competition can affect the net aftertax earnings by $4\frac{1}{2}$ times all the other forces working against A.T. & T.

That, gentlemen, I would suggest to you is a very great substantial impact, a very substantial threat. Does it not follow that if you are in effect going to come in and chop off a segment of a monopoly business that somehow the bottom line earnings have got to be affected?

I think this is the question that docket 20003 ought to look at. I think these are the questions that the utilities ought to be called upon to answer. I would also point out of great interest that reading the speech to the shareholders of the 1974 annual meeting, the 1973 statements in the financial statement submitted to the shareholders, and the report to the New York analysts, Mr. deButts made—and in the utterance in the recent \$500 million bond issue—no reference to the potential impact of competition on their earnings.

That is very, very much down played. As a matter of fact, if my figures are anywhere near correct, that estimate of 7.65 percent, I would suggest, A.T. & T. better go back and take a look at their legal liability in misrepresenting to the financial community the impact of competition.

I would just merely summarize by pointing out that, yes, I have enumerated a large number of complaints, individual instances which are quite similar to those complaints registered by others.

I won't go into them. They are reasonably documented, I hope, with some degree of objectivity and some degree of substantiation. I tried to be very careful not to look at everything and make any wild, irresponsible statements. I will merely point out right now the fact of the matter is that outside the State of California the practical reality is such that after 4 years of contact with A.T. & T. I cannot practically market my equipment unless I find one unique customer here and there that may require it.

I have also suggested what I think should be done in order to resolve the problem at A.T. & T.

I was back here 6 weeks ago talking to the Federal Communications Commission and have an appointment again tomorrow. I am asking that Commission to grant me the identical thing the California Supreme Court has granted me. I do not want to be further burdened with tariffs that are unjust and unreasonable when their

legality is so challenged, and the telephone company utilities have not met the burden to show harm.

I am asking for the same type of relief, an interim order from the FCC, that my customers will not have to pay for connecting arrangements.

Unfortunately, my one and only experience with the commission—the California Commission—has been very, very unsatisfactory. I am a little concerned about what the FCC may or may not do.

[See exhibit 3 at the end of Mr. Feiner's oral testimony.]

Mr. FEINER. Regrettably I have also had to file an identical complaint case to that in California before the New York Public Services Commission.

I have made the point to the FCC that it is unfair and unreasonable to compel me to file these actions in each and every State, and that I am on record, and I will go on record again tomorrow, and state unequivocally that unless I am reasonably assured of some action, yes or no, as opposed to sitting on my informal complaint as they have done since October of last year, that I will have no other course, no other course but to go into Federal court and ask for that immediate interim relief from a Federal judge with the full expectation that that judge will, as has been done in at least two previous cases, remand that issue back to the FCC for the resolution of the basic question of whether or not the Phonemaster is harmful to the network.

If I cannot get such an injunction, such relief from the court that will enable me to market outside of the State of California, then I can only say it is a hell of a day when a small company like mine, doing less than \$1 million in sales a year, may be compelled by the inaction of a commission to go into a Federal court and bear those further expenses and get involved in antitrust action, which is a staggering business problem, and that is something I do not want; I have diligently avoided it.

You do not build a company on litigation; you build it on sales.

That notwithstanding the fact that I think I have A.T. & T. cold, dead to rights, right up against the wall on this issue of nonavailability. I won't even quarrel about whether the Phonemaster is harmless, whether or not the connecting arrangement is truly required.

I will merely go back and say the 4 years they did not provide them that they kept me out of the marketplace for that period of time.

Mr. CHUMBRIS. May I interject a question at this point? When you are discussing the matter before the courts of California, is there also in that same litigation petitions by you that would prevent the telephone company to get tariffs on its own equipment that will do the type of work that yours does?

Mr. FEINER. I will tell you precisely what has happened.

I go into that competitive aspect which I consider interest enough. Although it is of major import I have set it aside as a minor issue.

They did in fact, about 2 years ago, come up and start to offer a competitive device called "Call Control." They were out quoting tariff prices on it. It was very, very low-priced equipment. They would never give a certain delivery date. They would talk about Call

Control, at a certain price. Everytime we came into a situation where we were trying to sell our product, this came up, Call Control.

At the subsequent hearings, some months later, I had the tariff man on the stand. Mr. Aschoff, and that testimony is in here. I asked him specifically the question, to determine that yes, he was the man responsible for setting those prices; and when I asked him how marketing people could be out quoting prices, he didn't know the answer to that question.

In my view that was a plain unfair, unreasonable marketing practice.

A year later they tried to do that again. They came up and filed a tariff on it, which would indicate at this point they had the hardware available, and they named the dollars.

Yes, I cried foul. I don't want competitive equipment coming on the market when they are using arrangements to negate my equipment.

I was faced not only with the cost of connecting arrangements, but defective connecting arrangements where it was difficult to keep systems operating from time to time.

You bet I don't want them filing competitive equipment. I took the view that until such time as that was resolved, it was unfair for them to be offering this kind of equipment.

They pulled those tariffs back.

Mr. CHUMBRIS. What I said was that I am sure that on July 9 and July 30, 31, which I believe are the dates set aside for the A.T. & T. to testify, the witnesses will give their version of this dispute that is currently before the Public Service Commission of California and the courts?

Mr. FEINER. There is no dispute now before the commission in California that I have at the present time. In my case, I don't care what happens with the commission of California now. The commission can do whatever it wants. I could care less. I have a California Supreme Court decision which allows me to go and market my equipment ad infinitum without my customers paying for those charges.

What is happening in California now is an ongoing case into the question of certification. My two cases, against General and Pacific are consolidated into those cases, and I am involved in those hearings.

Mr. CHUMBRIS. That is what I am referring to. That hasn't been resolved yet?

Mr. FEINER. No. That doesn't change the fact that for 4 years, I have not been able to market my equipment outside the State of California. I don't know how they could effectively answer that question. I would love to hear an antitrust attorney or legal counsel answer how they can deal with that. That is a fact.

They had a tariff on file that says you have got to use these connecting arrangements. Then it takes them until March of this year to finally have them available. Once they are available, to have them priced at such a rate that they cost more than my equipment? I wouldn't want to be the attorney defending that.

I don't want that lawsuit, although I think it is a good one. That

is not the way to build a company. I cannot go into the financial community and raise a dollar talking about an antitrust case against A.T. & T. But if I have to do it, I will do it. Nothing will keep me from doing business outside the State of California.

What infuriates me is the inaction of the FCC—and maybe they need a month or 2 more—that I would have to be compelled to get into an antitrust action, and that we have the U.S. Department of Justice, floating around on these cases, and filing interesting briefs. They are absolutely useless. When I sit here and look at my situation for 4 years, not being able to market, and I know the California utility has an unlawful monopoly in the utility business, and I approve of this bill you are considering, the thrust of this bill; but by God, how about the enforcement of plain old everyday antitrust laws?

Here I am doing less than a million dollars a year in business. I had to go all the way to the California Supreme Court. Can you imagine what that cost my company in time and effort, plus the \$300,000 in foregone revenue?

That is not fair, not by a long shot.

You can line up 50 A.T. & T. attorneys, and I will take on every one of them on that issue. I don't think they have a word to come back on.

Mr. CHUMBRIS. I have some other questions, but I wanted to interject that at that particular point.

Mr. FEINER. I think I have fairly well concluded my statement other than the fact of making recommendations. I think frankly the Justice Department is remiss, I think the antitrust laws of this country are being violated. I think the telephone utilities should be compelled to leave the customer equipment market, in the same manner they were able to compel DuPont to divorce their General Motors stock.

I don't know why we need a law to do that.

I also suggest, I think, that you have a simple technique by which you can reduce the monopoly power of A.T. & T. by creating stock exchanges where A.T. & T. shareholders will end up with stock in Pacific Telephone's approach to A.T. & T. stock; certainly to reduce A.T. & T. to a minority shareholder position, decentralizing the management and control of those companies, cause the board to perform on their own and compete with one another in the financial community in order to raise their dollar funding.

I think the same type of a transaction could be accomplished with Western Electric; where Western Electric could also be divorced in a similar stock transaction manner, making it independent from A.T. & T.

Western Electric ought to be foreclosed from marketing its customer equipment market products directly to the telephone companies, because they would be foreclosed from that market and may or may not be able to market directly to the people supplying those types of equipment to the end subscriber.

I think you have simple techniques under existing laws by which this power could be decentralized. I think you would end up with a far more powerful and effective telephone company.

There is another advantage to causing telephone companies to divorce the customer equipment market. It relieves them of tremendous capital equipment requirements. It becomes a staggering problem, a bigger problem every day for them to raise the enormous amounts of money required.

I am convinced from everything I know that we would end up with a better telephone system if the telephone utilities were compelled to concentrate on only that portion of the telephone business which is truly a natural monopoly; that is the local exchange network. I won't get into the convictions why I believe the specialized common carriers are proper, why that particular area of competition is not a natural monopoly where the telephone company is concerned either.

I think A.T. & T. should be reduced to its Long Lines Department competing with the specialized common carriers, and reduced to a minority shareholder, minority-voiced position with the Bell-affiliated companies. This would be my recommendations.

Right now my focus as an individual company is on the plain fact I cannot market my equipment outside of California. The Justice Department will do absolutely nothing. I don't know what they could do. I may as well forget about the Justice Department. I may be compelled to go to Federal court in order to redress my grievance.

Senator HART. That was a magnificent summary. I don't see a note in front of you.

Mr. FEINER. Having lived for it as long as I have, I could speak extemporaneously, I am sure, as a Senator in a filibuster.

[Laughter.]

Senator HART. I had gotten through page 22 of your summarized 25 pages, and I promise that I shall read the remaining three as well as do some reading of the prepared testimony.

The record of the Justice Department, under every administration, for speed in processing antitrust complaints is a dim one. I am sympathetic on occasions because the significant cases are enormously complex, and the Congress doesn't give them enough tools; which explains in part why I propose a legislative action.

I would anticipate that these hearings may stimulate some interest by the Justice Department.

This morning—and you were present—descriptions were put in the record of the competitive difficulties that were faced by equipment providers and by private-line people. You made a sale of your equipment to the county of Los Angeles. I have been trying to read, while listening to you, this magazine, Communications News Story. I haven't gotten through it.

You say that the installation of your equipment had a cost of \$50,000 to the purchaser, and saved the purchaser \$30,000 a month. Recount, if you will, the steps you took to persuade that purchaser to buy your equipment.

Mr. FEINER. Well, that was a unique circumstance, where we had a public servant, a very bright, alert, and dedicated man who came into that job and observed this horrendous telephone bill.

Senator HART. Horrendous telephone bill?

Mr. FEINER. That the county was getting.

He could in no way account for so many of these long-distance calls. Indeed, there was no way because there was no control on them whatsoever. They are supposed to go through the switchboard. Of course, people could dial directly out. That frustrated him.

Part of his new job was also the analysis of the tremendous number of multimessage unit charges that they were incurring.

Let me explain briefly. A multimessage unit charge is like a small type of a long-distance charge. You get a geographical area like the 213 area. The further out you call from the facility, the more message unit charges you incur.

It may be three for the first 3 minutes, five for the first 3 minutes, one every minute thereafter.

When these calls go to outlying areas these multimessage unit charges add up.

This man was aware of the fact that if he purchased special foreign exchange trunklines going from his facility over to a foreign exchange and those calls were placed on that foreign exchange, they would be at a flat rate of one message unit or one nickel.

After paying the higher charge for the foreign exchange trunk the net reduction in the telephone bill was \$13,000.

He was a man that could understand how he could effect those savings.

You see, the telephone company, as he knew, will offer these foreign exchange services, but without an effective way of controlling it, it is pointless to buy them.

They offer you WATS lines and so forth because they effect certain cost economies and can provide these services at lesser charges.

Unless you can enforce the proper discipline of those trunks you will never save those dollars.

This was a bright man who understood his problem; with the availability of our equipment he knew that he could remedy that problem.

As a pilot situation he put a small system of ours in for about \$7,000 or \$8,000 in another county facility just to try it out. Once he did that he realized on his own, through his own analysis, what he could save.

It turned out to be substantially more than he anticipated. He figured he could save—I think he cost justified the purchase by estimating \$18,000 and he hit \$30,000.

I might add, generally speaking on that score, that we cost justify our equipment by mere examination of the telephone bill as a rule where you can see printed out precisely the charges that are incurred, that had the proper trunks been used they would not have been incurred.

Therefore, it is a black and white decision for somebody on pure, hard economics.

Senator HART. In your sales presentation and effort did you run into any practices which you would claim to be unfair on the part of Pacific Telephone?

Mr. FEINER. Here I want to be careful. I want to be objective and fair.

I think the only practice that I could say was definitely improper was the case of the call control unit where they were quoting a tariff on a piece of hardware not yet available and quoting a dollar consideration by letter—not verbally—I can produce a letter—quoting a dollar charge when that charge had not yet been approved.

That, I think, was an unfair practice.

It is important to differentiate between what you think the over-zealous act of an individual communications representative is as opposed to the policy of the telephone company.

For example, a couple of weeks ago I had a specific complaint about the actions of the telephone representative, again quoting call control when it was not available. We were able to shoot that down in the field all right.

When I complained to an officer of Pacific Telephone, I believe he immediately went to work on it to make sure it would not happen.

They have people problems. But I cannot in fairness say that I have been up against what I have ever noticed to be deliberate policy in that regard.

Senator HART. I appreciate your answer.

Mr. HELLERMAN. In that same connection, how are the citizens of Los Angeles County affected by the installation of your equipment?

Mr. FEINER. \$360,000 a year. That amounts to, for the 7 million citizens, about a 5-cent savings per county resident per annum, which is a residential subscriber. If you take that savings and capitalize our equipment, that \$50,000 piece of hardware was worth \$4 million if you capitalize it at 9 percent.

Mr. HELLERMAN. Going back to your earlier statements concerning what you consider to be the real question and the real reason why A.T. & T. is fighting certification interconnection, do you believe that there is a real question as to the ability of A.T. & T. to continue to raise the amounts of capital it anticipates it will need?

Mr. FEINER. I think there has to be an area of tremendous general concern with the growing system like this. I think certainly anything that can be done to alleviate the voracious appetite for capital that the telephone utilities have would be tremendously beneficial, and—

Mr. HELLERMAN. For the record, would you explain how a policy encouraging interconnection could affect A.T. & T.'s capital requirements?

Mr. FEINER. Causing the divorce in the customer equipment markets.

Mr. HELLERMAN. Is that a substantial portion of that capital?

Mr. FEINER. I think it would have to be a very substantial portion.

Mr. HELLERMAN. On page 8 of your statement, the last sentence of the first paragraph says:

The controversy described revolves around the very basic issues * * * the personal and working relationships between personnel of all companies at all levels has been generally excellent.

Could you easily have added except that you have had to devote most of your time to regulatory matters and have been effectively precluded from offering your equipment outside of California?

Mr. FEINER. Like I say, those are really basic fundamental policy decisions that compel me to be before regulatory agencies to solve my problem. You know, to paraphrase Will Rogers, I have never met a telephone company man I didn't like. That makes it exceedingly difficult to compete with them, because it is on that kind of a friendly basis.

Mr. HELLERMAN. Could you indicate for the record the resources, both manpower and funds, that you had to utilize in order to continue to sell your products?

How much of your personal time is devoted to regulatory matters and antitrust matters?

Mr. FEINER. I would estimate probably 75 to 80 percent of my time as a chief executive officer of the company is absorbed with regulatory matters, and I would just say that that is the ongoing case in California, the case in New York, involvement in the *North Carolina* case, involvement in the NARUC investigation, activities with the Federal Communications Commission, being before this body here.

The sum total of all those activities takes at least 75 percent of my time.

Mr. HELLERMAN. Could you give us a dollar estimate as to your expenses?

Mr. FEINER. I would say the sum total of these problems in legal expenses and executive time has got to exceed \$100,000.

Mr. HELLERMAN. A year?

Mr. FEINER. That is total since we have been in business. Right now I would guess it is probably close to—legal and my time—I would say around \$40,000, I would guess. That is 4 percent of our annual sales, I might add.

Mr. HELLERMAN. Calling your attention to exhibit P-1 in your prepared statement, an advertisement you complained about very strongly, are you aware of similar advertisements by A.T. & T. to discredit interconnect companies and their equipment.

Mr. FEINER. I know of no other ad by A.T. & T. and its affiliates I would have put in this classification. I would say that there are other ads that I have seen that have been in reasonably good taste.

Mr. HELLERMAN. I have come across one in the PSA magazine which I would like to have put in the record.

[The ad referred to can be found as exhibit 4 at the end of Mr. Feiner's oral testimony.]

Mr. FEINER. Which one is that?

Mr. HELLERMAN. I don't have it right here.

Mr. FEINER. Is that the one with all the attachments?

Mr. HELLERMAN. Yes.

Mr. FEINER. I thought that was marvelously funny. It showed all the things they did not do with their equipment which I thought was interesting.

Mr. HELLERMAN. Going back to your testimony before the Cali-

fornia Public Utilities Commission, on case No. 9625 could you comment further on your question No. 7? Question and answer No. 7.

Mr. FEINER. I am sorry.

Mr. HELLERMAN. Would you comment further on that question?

Mr. FEINER. Where is that?

Mr. HELLERMAN. In your prepared testimony concerning the *California* case.

Mr. FEINER. You will have to guide me. I don't know where to find it. What page are you on?

Mr. HELLERMAN. Page 4 of exhibit II-1.

Mr. CHUMBRIS. You go from H to K in mine.

Mr. FEINER. All right. I see.

You are talking of the prepared testimony?

Mr. HELLERMAN. Yes.

Mr. FEINER. What is your question? You are asking about question 7?

Mr. HELLERMAN. Yes; your answer to that. Would you care to comment further on it?

Mr. FEINER. Let me just read it.

The point I am trying to make is that the New York analysts put him to the wall so to speak on the question of the impact of competition on earnings, and what he said is that he didn't see any problem. He was concerned about A.T. & T.'s bottom line.

My observation there is that I don't know how anybody could say he can't be concerned about the bottom line when the 14-year history shows a negative earnings per share increase of 1.63 percent. He would have to be vitally concerned about that.

I think what we have here is a skirting of the basic issue. I don't think he is being candid is what I am saying.

Mr. HELLERMAN. On page 12 of that same testimony, your answer to question No. 27, "No certification can work."

I would like to read into the record the closing remarks, President's Conference, Key Largo, Fla., May 12, 1972, John D. deButts, page 5:

There seems to be little difference of opinion that to compete effectively in the PBX field we need to offer customers the option of purchasing outright. Our concern centers on whether or not the decision to sell would trigger certification.

That supports your beliefs?

Mr. FEINER. Yes; unfortunately many good exhibits are left out only because of the size of it. There are many, many other supporting comments.

Mr. HELLERMAN. At this point, Mr. Chairman, I would like to introduce one further document. It is a rather, I guess, unique document to have in this record. It is sort of a case history of one other company trying to market its product. The company is Rice International Corp., Miami, Fla. They have telephone equipment which they have been precluded from selling at all because of the inability or unwillingness of A.T. & T. to provide an interface device.

Senator HART. It will be received.

[See exhibit 2 at the end of Mr. Feiner's oral testimony.]

Mr. HELLERMAN. No further question, Mr. Chairman.

Senator HART. Mr. Chumbris?

Mr. CHUMBRIS. I have no questions, Mr. Chairman.

The document that you referred to, Mr. Hellerman, do you have a copy of that?

Mr. HELLERMAN. We will make one available.

Senator HART. Well, I anticipated a much longer afternoon. Apparently you anticipated all the questions.

Mr. FEINER. I could talk another hour if that is useful.

[Laughter.]

Senator HART. We appreciate very much your testimony.

I will close on a note I am not often sounding: Don't give up on the Justice Department in this general area of the fight yet.

Mr. FEINER. From a time standpoint they are useless.

Senator HART. In your particular instance?

Mr. FEINER. Well, I think we will be completely grey before something happens in that area.

Senator HART. We adjourn to resume at 11:30, Thursday, June 27, in room 1114 of this building.

[Whereupon, at 11:30 A.M., the hearing was adjourned, to reconvene at 11 a.m., Thursday, June 27, 1974, in room 2228, Dirksen Senate Office Building.]

[The following was received for the record. Testimony resumes on p. 3727.]

MATERIAL RELATING TO THE TESTIMONY OF ROBERT L. FEINER

EXHIBIT 1.—*Prepared Statement*

STATEMENT OF ROBERT L. FEINER, PRESIDENT, PHONETELE, INC., VAN NUYS, CALIF.

PURPOSE OF STATEMENT

General Purpose -

- * to describe the operation of Phonetele's product, the Phonemaster, a toll and message unit restrictor that saves telephone subscribers substantial sums of money;
- * to describe how the Phonemaster provides a valuable subscriber service not adequately provided by the telephone utilities.

As to actions of the telephone utilities in California -

- * to describe the impact of 3 1/2 years of regulatory and judicial confrontations thrust upon Phonetele;
- * to describe defective connecting arrangement problems;
- * to describe the competitive effect of connecting arrangements.

As to actions of AT&T outside of California -

- * to describe how Phonetele was foreclosed from marketing outside California for four years because connecting arrangements were not available;
- * to describe how Phonetele is presently de facto foreclosed from marketing outside California due to the high cost of connecting arrangements now available;
- * to describe how Phonetele has been compelled to file a formal complaint in New York, and an informal complaint with the FCC, and may be further compelled to file an antitrust action in Federal Court.

As to other matters -

- * to describe why the telephone utilities have had and still retain an unlawful monopoly of the customer equipment market in that this segment of the market is not a "natural monopoly," by accepted economic definitions;
- * to describe why network "harm" and economic impact are primarily propaganda arguments, the real concern of AT&T being earnings per share.

EXHIBITS

The Exhibits listed below were submitted by Phonetele in two state cases. The first involves the California Commission, Case 9625, which is an investigation into certification, and Phonetele's ongoing complaint cases against Pacific Telephone (Case 9265) and General Telephone (Case 9177). The second involves the New York Commission (Case 26607) and Phonetele's formal complaint against New York Telephone and General Telephone of Upstate New York. These Exhibits appear in either or both the California and New York cases, as they may be pertinent. Though each Exhibit is cited, some have been omitted or abbreviated in the interest of space. Complete Exhibits are available and all Exhibits have been previously submitted to the Subcommittee's Staff.

EXHIBIT	DESCRIPTION	C = COMPLETE A = ABBREVIATED O = OMITTED	PURPOSE OF EXHIBIT
A.	Unanswered letter complaint to the Commission about malfunctioning ZZAGM connecting arrangements and a request that the Commission enforce its orders.	O	Relates in very specific detail how the ZZAGM is defective. (California)
B.	Certification by Communication Certification Laboratory	A	Shows Phonemaster is certified as harmless.
C.	A letter by Arthur Latno, Pacific Telephone Vice President, that accompanied their Certification Study in the Phonetele Case.	A	Shows Pacific (AT&T) is against certification.
D.	Petition to Modify; Advice Letter No. 11178; Sigelman and Stein letter to the Commission.	O)))))	EXHIBITS D, E, F and G pertain to esoteric issues in the California Case and are of little importance to this Hearing.
E.	Petition to Modify - Second Request; Advice Letter No. 11184.	O)))	

EXHIBIT	DESCRIPTION	C = COMPLETE A = ABBREVIATED O = OMITTED		PURPOSE OF EXHIBIT
F.	Petition to Modify - Third Request; Advice Letter No. 11188; Sigelman and Stein letter to the Commission.	O))))))	
G.	Petition to Modify - Fourth Request; Advice Letter No. 11186; Order of Suspension and Investigation.	O))))	
H.	Defining "Connecting Arrangements" from the Phone-tele Case Transcript.	C		Shows Pacific violates its own definitions.
I.	John deButts, Chief Executive Officer of AT&T, Speech to National Association of Regulatory Utility Commissions (NARUC).	O		Included for the benefit of the California Supreme Court.
J.	NARUC Notice of Investigation.	O		Not timely to this Hearing.
K.	Unanswered argument on utility service charges from the Phonetele's Opening Brief on the subject of unfair competition.	C		Shows unfair practice.
L.	"Just and reasonable" testimony from the Phone-tele Case Transcript.	C		Shows failure of Pacific to satisfy just and reasonable tests.
M.	Unanswered letter complaint to the Commission on the unfair competition aspects of basic termination charges and other Pacific practices.	A		Shows unfair practices of Pacific.
N.	Article from the January 1974 issue of COMMUNICATIONS NEWS.	C		Shows \$50M Phone-master saved LA County \$30M.

EXHIBIT	DESCRIPTION	C = COMPLETE A = ABBREVIATED O = OMITTED		PURPOSE OF EXHIBIT
O.	Reprint of Phonetele's ad in the February 1974 issue of COMMUNICATIONS NEWS.	C		Phonetele's indictment of Pacific's practices.
P.	An answered letter complaint to the Commission on a Pacific Telephone advertisement.	A		Shows advertisement practice of Pacific.
Q.	General Telephone Connecting Arrangements; An Affidavit from Alex Taylor; A series of Phonetele Service Reports.	O))))))	EXHIBITS Q, R, S and T are painstaking documentation in most specific detail as to problems with Pacific and General connecting arrangements. Neither telco has refuted them. Summarizes costs to Phonetele and "injuries" to subscribers.
R.	Pacific Telephone Connecting Arrangements; An Affidavit from Alex Taylor; A series of Phonetele Service Reports.	O))))))	
S.	General Telephone Connecting Arrangements; A case study of Claude Short Dodge.	O))))))	
T.	Pacific Telephone Connecting Arrangements; A case study of Studio Instrument Rentals.	O))))))	
U.	Exhibit from the Phonetele Case Testimony of Paul Popenoe, Jr., Staff Recommendation.	O		
V.	An Affidavit from Alex Taylor about directly connected Phonemaster installations.	C		Shows harmless direct connection experience.
W.	A list of Phonemaster users.	C		Updated to May 1, 1974.

EXHIBIT	DESCRIPTION	C = COMPLETE A = ABBREVIATED O = OMITTED	PURPOSE OF EXHIBIT
X.	A letter to D. H. Erickson of AT&T about Bell System connecting arrangements.	C	Explains problems of non-availability of AT&T connecting arrangements.
Y.	Certification Specifications proposed under the California Public Utilities Commission's Order Instituting Investigation.	O	EXHIBIT B is based upon this criteria.
Z.	Minutes from three meetings held to develop a Bell System connecting arrangement.	C	Chronicles the development of Bell System connecting arrangement.
AA.	Comments of the Department of Justice in the current California certification investigation.	O	Interesting, but not pertinent to this Hearing.
BB.	A copy of Pacific Telephone's tariff on the ZZAGM protective interconnecting arrangement.	O	Shows cost of ZZAGM.
CC.	An FCC MEMORANDUM OPINION AND ORDER in the Phone-Mate Case.	O	Not pertinent.
DD.	AT&T's Executive Planning Committee document entitled "Interconnection" dated March 1973.	A	High-level AT&T admission of inability to document network harm.
EE.	"Opening Remarks" by J. D. deButts at the Executive Planning Committee's Presidents' Meeting, October 2, 1973.	O	Very interesting generally, but not pertinent to this Hearing.
FF.	AT&T's Network Access Pricing Plan (N.A.P.).	O	Shows if there is certification, they have "a plan."

EXHIBIT	DESCRIPTION	C = COMPLETE A = ABBREVIATED O = OMITTED	PURPOSE OF EXHIBIT
GG.	California Supreme Court Decision.	C	Court supports Phonetele 7-0.
HH.	Customer Trunks/Levels.	O	Shows customer size.
II.	AT&T letter dated February 13, 1970.	C	Shows early contact with AT&T on connecting arrangements.
JJ.	"Harms" as outlined by Robert W. Hoffmann of Pacific Telephone.	O	Cites harms of interconnect equipment, failing to cite harm of Phonemaster.

NOTE: Inserted at this point is prepared testimony of Robert L. Feiner submitted in California Public Utilities Commission Case 9625 on June 20, 1974. The following Exhibits are attached to the testimony:

KK.	Excerpts on competition from the remarks of John deButts in AT&T's 1973 Annual Report.	0)))))	These Exhibits indicate that AT&T is making no disclosure as to the effect on future earnings due to competition, in fact, such future effects are completely discounted.
LL.	Comments on competition from John deButts' report to the New York Society of Security Analysts, February 27, 1974.	0)))))	
MM.	Excerpts on competition from the speech made by John deButts at the 1974 Annual Shareholders' Meeting.	0)))))	
NN.	Excerpts on competition from the Prospectus on the recent 500 million dollar AT&T debenture offering.	0)))))	

EXHIBIT	DESCRIPTION	C = COMPLETE A = ABBREVIATED O = OMITTED	PURPOSE OF EXHIBIT
OO.	Excerpts from AT&T's Annual Statistical Report for 1973.	O	Supports data in EXHIBIT PP.
PP.	AT&T earnings per share analysis.	C	Shows earnings per share performance.
QQ.	Page C-11 from the NARUC Report After Investigation.	C	Shows NARUC's estimate of inter-connection market penetration.
RR.	Quotation from Theodore N. Vail, founder of AT&T.	C	His views on honesty.
SS.	Definitions of Natural Monopoly.	C	Shows that the customer equipment market is <u>not</u> a "natural monopoly."
TT.	Phonetele marketing brochure.	C	Explains the Phonemaster.

STATEMENT OF ROBERT L. FEINER

Preface

Though this statement is a personal view of numerous problems with the telephone utilities, every effort is made to express each of these problems as objectively as possible. It is believed that each and every allegation is supportable, and considerable effort was made to document most of them by attached Exhibits. While the telephone utilities may, in the final analysis, be held to account for certain acts that will be discussed below, there is no evidence to support the allegation that these acts were ever maliciously intended, and no such allegation is made. The controversies described revolve around very basic issues, and notwithstanding very substantial differences on these issues, the personal and working relationships between personnel of all companies at all levels has been generally excellent.

Personal
Profile

I was a founder of Phonetele, Inc., am a major shareholder, and am its President and Chief Executive Officer. I hold a Bachelor of Science degree in Business Administration from UCLA, graduating in 1952. (See Testimony following EXHIBIT JJ.)

Phonetele, .
Inc.

Phonetele, Inc., is privately held, was incorporated in 1970 in the State of California, and has been in business since 1969. It is located at 15414 Cabrito Road, Van Nuys, California, 91406, (213) 988-5470. Sales are under \$1,000,000 annually. The Company was profitable during the second half of 1973, but incurred a nominal loss in the first quarter of 1974 due primarily to legal expenses. The Company was funded by two privately conducted stock subscription offerings totaling \$450,000, and by loans from officers. The Company uses the auditing services of Peat, Marwick, Mitchell & Company.

Phonetele's
Business

Phonetele, Inc., is in the business of manufacturing the Phonemaster. The Phonemaster was conceived, developed and engineered by the Company, and is presently manufactured, marketed, installed and maintained by the Company or its designated agents. The Company plans other product development, but regulatory confrontations have so impeded the Company's progress that such planned development is delayed indefinitely.

The
Phonemaster

The Phonemaster is a toll and message unit restrictor. It is a solid state special-purpose mini-computer designed specifically to interface with the telephone network. It is programmed to control what prefixes and area codes can be dialed on specific telephone trunks. (See EXHIBIT TT for description.) Patent applications have been filed on the Phonemaster. In a recent trade secret action filed by Phonetele in Superior Court in California, the Court found for Phonetele determining that Phonetele did indeed possess valuable trade secrets.

The Customer's
Problem

A telephone customer may examine calling patterns, i.e., will make a determination where calls are going and in what volume. Based upon this usage of telephones it may be determined that economies can be effected by utilizing special kinds of telephone lines. These lines include various types of WATS, foreign exchange, and tie-lines. The telephone company can make these various economic offerings, because it too will effect cost economies by directing calls over the least-cost-path route.

Once such service is installed, there is an immediate problem. Employees do not use the lines correctly and therefore charges appear on telephone bills that would not have been incurred had the proper line been used. The subscriber does not usually achieve the desired economies. The telephone company's central office equipment is needlessly overburdened as a consequence. No one is benefiting to the extent they should. Frequently such line services will not be purchased because subscribers realize that there is no dialing control, and that the economies cannot be realized in practical operation.

The
Solution

The Phonemaster enforces the proper use of the trunks, thereby enabling both the subscriber and the telephone company to effect the economies intended under such service. It accomplishes this through a customized program that monitors the prefixes and/or area codes dialed, and will terminate calls improperly placed. This compels calls to be placed on the correct line.

A Los Angeles County facility purchased a \$50,000 Phonemaster and achieved savings of \$30,000 per month. That story is told in a reprint of an article in COMMUNICATIONS NEWS, which is attached as EXHIBIT N.

Telephone
Company
Practices

It is generally the marketing policy of the telephone companies (particularly AT&T) not to offer equipment such as the Phonemaster except on a demand basis. The equipment they do offer is archaic electro-mechanical equipment vs. the solid state Phonemaster, requires about eight times the space, has greater service problems, is costlier, lacks substantial programming capability, and is not offered with key telephone systems. A general indictment of the telephone company's practices appears as EXHIBIT O, which is a reprint of an ad published in COMMUNICATIONS NEWS addressing the situation described in EXHIBIT N.

Many customers have replaced telephone company equipment with the Phonemaster. This is a common occurrence.

The Public
Interest

An examination of EXHIBITS N and O should make clear that the Phonemaster serves an important subscriber need, and that only through competition was this need fulfilled. If it were not for competition there is little reason to believe, based upon past performance of the telephone companies, that such an effective product as the Phonemaster would ever be offered.

Many of Phonetele's customers pay for the Phonemaster in less than one year. The fundamental American principle of freedom of choice should prevail. Each customer should be freely able to select whatever product is desired. Regulators, judges, legislators and telephone companies should not dictate to the customer what equipment should be used. The only condition should be, and a reasonable one, is that the product utilized should not be harmful to the telephone network.

It is reasonably implied that Phonetele's customers support this view. The customer list (EXHIBIT W) is prestigious, covering a complete cross section of the business community and government. Though many users are identifiably large companies, the Phonemaster systems frequently are serving their small facilities.

Customer
Relations

Phonetele enjoys excellent relations with its customers. There has never been a fractured customer relationship.

Phonetele's service response is swift and effective, and there is no evidence to suggest customer dissatisfaction. The Phonemaster is highly reliable and the

minimum first year warranty reserve established satisfies the Company's auditors. Phonetele has never failed to receive payment in full for its equipment.

**The Telcos
Benefit**

As previously stated, the telcos offer restriction equipment on a demand basis only. They believe all callers should have free access to the telephone network, otherwise their revenue is reduced. This is the philosophy of the "old guard," and it prevails. A "new guard" is more enlightened. It is slowly recognizing the tremendous customer hostility needlessly engendered by having failed and continuing to fail to provide effective restriction equipment.

Calls not directed over the network's least-cost-path route requires heavier central office equipment investment to handle this increased and unnecessary traffic activity. As usage sensitive pricing increases, central office capital equipment requirements will increase, and the problem will be magnified. The example of the Los Angeles County facility described in EXHIBIT N indicates that the \$34,000 monthly charges in multi-message units dropped by a net savings of \$13,000. This is a 38% reduction not only in the telephone bill but roughly on the burden placed upon central office equipment. For a capital intensive business moving toward usage sensitive pricing, call restriction equipment should figure prominently in future planning.

**Telcos as
Phonetele
Customers**

Under the right of the customer to have the free choice of buying whatever equipment is considered best, the customer should also have the free choice, under present conditions, to acquire the best available equipment not only from an outside vendor but from the telephone utility as well. The Phonemaster is generally acknowledged in the industry as the best equipment of its type. It has always been offered for sale to the telcos so their subscribers may be afforded the opportunity to obtain the Phonemaster from them as well as Phonetele. At the present time the Phonemaster is only available through Phonetele. The only equipment sale to a telephone company is to Lincoln Telephone and Telegraph Company in Lincoln, Nebraska for use in their central office to control WATS lines.

The Telcos
Position

The telcos are opposing competition for the following reasons:

- 1) They allege that a certification program to allow direct connection of customer owned equipment is not feasible and will cause network deterioration, demanding in the alternate that customer owned equipment be connected only through telco provided protective connecting arrangements.
- 2) They allege that competition will cause residential telephone rates to rise and that these subscribers will be "harmed."
- 3) They allege that they possess a "natural monopoly" over the customer equipment business.

Phonetele's
Position

Phonetele, of course, favors competition as being in the public interest, and believes as follows:

- 1) That a certification program is entirely viable and should be enacted, and that utility provided protective-type interconnecting arrangements are not required.
- 2) That residential rates need not rise.
- 3) That the telephone utilities do not have a "natural monopoly" of the customer equipment market.
- 4) That the real concern of the telephone utility is their earnings per share.

Certification

Certification is the primary issue of FCC Docket 19528, now moribund, and California PUC Case 9625, now in progress but seriously emasculated by economic issues. The Phonemaster is certified (EXHIBIT B) under current CPUC proposed criteria (EXHIBIT Y), and is opposed by Pacific Telephone (AT&T policy) per EXHIBIT C.

Protective
Connecting
Arrangements

Phonetele has been embroiled in three and one half years of regulatory and judicial controversy in California against Pacific Telephone and General Telephone over their requirement that protective-type connecting arrangements be utilized based upon

- 1) original non-availability in California;

- 2) incompatibility of the arrangements to the Phonemaster and their operational liability (see EXHIBITS A, Q, R, S and T);
- 3) their cost; and
- 4) their requirement by the telcos under tariffs that did not differentiate between harmful and harmless devices.

Phonetele alleged that the utilities did not meet

- 1) the "just and reasonable" tests required under the law (EXHIBIT L);
- 2) could not support the requirement of protective connecting arrangements per their own definition (EXHIBIT H); and
- 3) had not shown harm (see EXHIBIT V). (Also, see EXHIBIT DD for high-level AT&T admission on "harm".)

California
Supreme
Court

The California Supreme Court ruled on these questions (see EXHIBIT GG) in favor of Phonetele (7-0). In essence, the Court concluded that the burden of proving harm is on the carrier and that where equipment is not clearly shown to be harmful to the network, the carriers cannot collect payment for protective-type connecting arrangements. The Court also instructed the CPUC to be "solicitous" on anti-trust matters and evidenced its interest in certification.

Residential
Rates

The National Association of Regulatory Utility Commissioners (NARUC) found that residential rates would rise but under the qualifying introductory comment - "under present regulatory practices." This May 15, 1974 Report After Investigation by NARUC is contradicted by the Dittberner Report prepared for the Office of Telecommunications Policy, alleging, per published reports, that residential subscribers are subsidizing business. The position of the Department of Justice is that "there is no reason for believing that allowing the interconnection of customer-supplied equipment would have an adverse impact on residential rates." The residential rate argument is a "scare tactic."

Natural
Monopoly

FCC Docket 20003 will address this issue. Following EXHIBIT JJ is testimony submitted in CPUC Case 9625

which should clearly indicate that the telcos do not, by any economic definition, have a "natural" monopoly over the customer equipment market. This allegation is not based upon a personal opinion, but by documented excerpts from numerous economic texts contained in EXHIBIT SS.

Earnings
Per
Share

The above-mentioned testimony, with supporting EXHIBITS OO, PP and QQ, observes that the per cent increase in AT&T's earnings per share lagged the per cent increase in revenue by an average -1.63% over the 14-year period from 1960 to 1973, and that the impact of customer equipment competition will further impact earnings per share by an additional negative 7.65%. This means that the impact of this competition is $4 \frac{1}{2}$ times greater ($7.65 \div 1.63$) than the sum total of all economic forces working against AT&T in the past 14 years. The conclusion of the testimony is that the telephone utilities are fighting competition to protect their shareholders, and are not fighting for the residential subscriber, or to protect the network from "harm."

AT&T
Delayed
4 Years

EXHIBIT II evidences Phonetele's first contact with AT&T on the subject of connecting arrangements. This Exhibit is an AT&T letter written when Phonetele was known as Carrillo Enterprises.

EXHIBIT X is a crystal clear analysis of the problems of obtaining a Bell System connecting arrangement.

EXHIBIT Z contains the minutes of meetings held to obtain a Bell System arrangement.

The first contact with AT&T we can evidence was February 13, 1970 and it was not until March 1974 that connecting arrangements were first available outside of California - over four years.

Costs Are
Prohibitive

AT&T foreclosed Phonetele from marketing its equipment for over four years due to non-availability of connecting arrangements. Phonetele has made one sale to a subscriber outside of California and that is to the New York Times. No other sale to a subscriber has been made or is pending outside of California.

The cost of the arrangements have the effect of continuing to foreclose Phonetele from marketing its

equipment outside California because the cost is more than the cost of the Phonemaster itself. The CTH arrangement, as it is designated, costs \$30.00 and \$6.25 per trunk for installation and monthly charges, respectively. Had the Times purchased the equipment on a five-year lease (instead of cash), here is a cost comparison:

	CTH COST	PHONEMASTER COST
INSTALLATION COST	\$4,500.00	\$3,687.50
MONTHLY CHARGE	\$ 937.50	\$ 848.13
AFTER 5 YEARS	\$ 937.50	(CEASES)

CONCLUSION: THE CTH PROTECTIVE CONNECTING
ARRANGEMENTS COST MORE THAN
THE PHONEMASTER ITSELF.

New York
Telephone
Complaint

Phonetele could only rarely sell its equipment under such onerous charges. The basic purpose of the equipment is to save money and the connecting arrangements have the effect of better than doubling the cost of the Phonemaster. On March 18, 1974, Phonetele filed a formal complaint before the New York Public Service Commission against New York Telephone Company and General Telephone of Upstate New York, Inc. It is designated Case 26607 and hearings have not yet been scheduled. This Case is a complete replay of the California Case against counterparts of the Defendants.

FCC
Informal
Complaint

Phonetele has requested of the FCC immediate interim relief identical to the California Supreme Court decision, i.e., order connection behind protective connecting arrangements without charge pending -

- 1) proof through evidentiary hearings that the Phonemaster is harmful, or
- 2) certification of the Phonemaster.

Phonetele has alleged that the telephone utilities have not, in over three and one half years' experience with the Phonemaster installed on their network, been able to evidence any harm, that their allegations

of harm run contrary to all findings including those of the California Supreme Court, that it is wrong that Phonetele should be further foreclosed from marketing equipment outside of California, and that it is unjust and unreasonable to compel Phonetele to file complaints before every state regulatory commission.

**NARUC
Report**

The aforementioned NARUC report supports competition in the ancillary field of telephone equipment while it opposes other competition. No doubt due to Phonetele's filing before NARUC, ancillary equipment includes call restriction equipment, and therefore Phonetele's request before the FCC does not run contrary to current trends or judicial precedent.

**Federal
Court
Action**

Favorable and timely action is not anticipated from the FCC. Phonetele will brook no further delays. Continuing denial of entry into the market place is intolerable. If positive indications of favorable and timely action is not shortly forthcoming from the FCC, Phonetele will file an antitrust action in Federal Court. Such action will seek immediate relief of the type afforded by the California Supreme Court, and will seek damages. We believe our damage claim will be substantial and totally supported by the mere prima facie fact that connecting arrangements were not available. We would expect immediate relief and a remand to the FCC to decide the question of network harm within a time certain. We expect that the Phonemaster will be once again found harmless to the network and such a finding will add to our claim for damages.

While our objective would be to seek relief from the burden of connecting arrangements, a Federal Court action would necessarily compel us to become involved in an antitrust suit, a course of action we have meticulously avoided due to our limited resources. Therefore, inaction by the FCC would be extraordinarily injurious to us by embroiling Phonetele in litigation it can ill-afford.

**Unfair
Competition
Allegations**

Phonetele's complaints as to the unfair competitive actions of the utilities are numerous, and they are as follows:

1. Litigation

In the first instance, it is unfair to be under constant siege. We are a small company that has

spent substantial sums of money and time in regulatory and judicial actions - in California, in New York, before NARUC, before the FCC and before this Senate Subcommittee. The fact that Phonetele won its case before the California Supreme Court only indicates the unfairness of the telcos forcing Phonetele to relitigate the identical issue in other forums.

2. Disconnection at Collins Foods
Phonetele was planning to install a unit at Collins Foods. General Telephone did not have connecting arrangements, nor could General state when they would be available. Rather than quit business, Phonetele hardwired the Phonemaster in violation of the tariffs. General disconnected the Phonemaster. Phonetele filed a formal complaint and obtained a cease and desist order from the CPUC and reinstalled the Phonemaster. This action by General was unfairly competitive with hindsight of the Court decision.
3. Pacific's Disconnect Notices
Phonetele obtained a favorable CPUC decision on the General Complaint allowing direct connection without protective arrangements, which General appealed. In the face of that known CPUC position on the Phonemaster, Pacific Telephone nevertheless required their customers, who had Phonemasters hardwired, to sign up for protective connecting arrangements (ZZAGM) then available for the first time. When these customers would not do so at Phonetele's instigation, Pacific issued disconnect notices which they voluntarily stayed with CPUC Staff intervention. This action by Pacific was unfairly competitive with hindsight of the Court decision.
4. Six Wire Leads
There was considerable controversy over the manner in which Pacific's ZZAGM connecting arrangements were to be interfaced with the Phonemaster, the former being designed to connect with six wires, the latter with four. The CPUC ordered Pacific to modify to four wires. The final Bell System arrangement is designed for four wires. The cost and effects of this controversy was unfairly competitive.
5. 1.5 Second Time Delay
Pacific demanded, unequivocally, and represented to the CPUC that a time delay requirement had to be a minimum 1.50 seconds. General required 1.00 seconds, and the Phonemaster provided 0.80 seconds. In the conferences described in EXHIBIT Z, it was revealed by Western Electric engineers that there was no way of defining a specific delay time and they could not

support the 1.50 seconds requirement. In other words, the 1.50 seconds was arbitrary. It was a sizeable issue before the CPUC and Phonetele contended that their demand was arbitrary, capricious, unreasonable and unfairly competitive.

6. Trade
Show
Disconnection

The first time Pacific's ZZAGM arrangement was available for test was at a major trade show where Phonetele was exhibiting the Phonemaster. The show is conducted by the TCA, an association of telecommunicating managers of prominent California corporations. Pacific insisted that the ZZAGM be utilized with Phonetele's demonstration unit. Phonetele did not wish to conduct a first test at a trade show. Phonetele further alleged there was incompatibility due to the above described four vs. six wire connection. Pacific disagreed and disconnected the Phonemaster which had been hardwired. Phonetele could not demonstrate its equipment at the show and was faced with the embarrassment of disconnection before prospects already dubious about the viability of interconnection competition.

Subsequent evidence on the record shows that Phonetele was correct in its contention that the ZZAGM as designed would not work with the Phonemaster, and Pacific should not have disconnected it. It should be pointed out that Pacific disconnected the Phonemaster only under the erroneous conviction that its ZZAGM would work and that Phonetele was being uncooperative. Pacific did not disconnect the Phonemaster with any malicious intentions, and no such allegation is made or implied.

7. ZZAGM
Troubles

Pacific (and General's) arrangements were a constant source of costly troubles which worked serious competitive hardships. These troubles are well documented in EXHIBITS Q, R, S and T, and EXHIBIT A.

8. Disobeying
Commission
Orders

Pacific (not General) repeatedly disregarded CPUC orders to allow direct connection of the Phonemaster if and when the ZZAGM was not available or malfunctioning. There is no complaint against Pacific on providing timely connection, but even though ZZAGM problems would continue for months to the effect of denying a customer complete and reliable service in many instances, Pacific would never facilitate direct connection. EXHIBIT A (separately available) chronicles those problems in detail.

9. Service Charges
- If the telcos make a service call to a subscriber's premises, and the fault is determined to be with the customer's own equipment, the telcos tariffs allow a service charge. In such cases, the customer should be able to backcharge the interconnect company during the warranty period. The converse is not true. When Phonetel (and other interconnect companies) make service calls during the warranty period that turn out to be telco problems, it has not been possible to collect a service charge, and there is no way under the tariffs to backcharge the telcos. EXHIBITS Q, R, S and T evidence the sizeable cost to Phonetel due to service calls on mal-functioning telco connecting arrangements.
- Phonetel has continually lodged CPUC complaints on this issue (EXHIBIT K) to no avail. The Company simply cannot pursue such claims in small claim courts, or wherever, because it simply cannot digest any more controversy.
10. Advertising Practices
- Attached is EXHIBIT P which is a copy of a Pacific Telephone ad and a self-explanatory letter. The ad is absolutely scurrilous in character. To Pacific's credit this ad was no longer used after the complaint was lodged. No doubt it was the work of an over-zealous ad agency approved by Pacific personnel inexperienced in more dignified competitive practices. Other ads have been effective but in good taste.
- Marketing presentations at trade shows directed at competition have consistently been in good taste. In those presentations economic comparisons are made, pointing out the financial burden of connecting arrangements incurred with customer owned equipment.
11. Basic Termination Charges
- EXHIBIT M describes a practice struck down in the recent IBM/Telex decision (under appeal) wherein Pacific retains an unreasonable hold on the market place by burdening customers with sixty months of charges (BTC's), which must be paid in full even if the customer terminates the service prior to sixty months. While Pacific alleges it sells "service," in this instance it is selling "hardware."
12. Accounting Practices
- Basic Termination Charges are not shown as a liability on a financial statement, even though they are contingent liabilities in the same way property leases are footnoted as contingent liabilities.

But no such notes are made on financial statements as to BTC's, and they can be very substantial. Therefore, obtaining equipment from the telephone company never impacts a financial statement, whereas customer acquired equipment does.

In marketing its equipment, annual capital budget considerations of sales prospects seriously affect Phonetele's sales. In addition, purchase of Phonetele's equipment under a lease impacts the balance sheet as to the current ratio and long term liabilities. Debenture and other loan agreements can thereby be affected because of limitations frequently imposed therein on current ratios and lease debt obligations. It is easier to acquire equipment from the telcos due to accounting practices, and this is unfair.

The accounting profession is at fault and both the SEC and the Financial Accounting Standards Board have ignored requests to take action. Such practices inure to the benefit of the telephone companies. Though no allegation is being made that they are in anyway responsible, they clearly benefit with the advent of competition. Not footnoting BTC's as contingent liabilities and not impacting the balance sheet is clearly an erroneous accounting practice. AT&T's auditors, Cooper & Lybrand, should be enlisted to have this changed - a dubious prospect.

13. Marketing Practices EXHIBIT M also describes a certain unfair marketing practice of Pacific with one of their competitive offerings.
14. Bell System Arrangements As described above, Phonetele has been proscribed from marketing its Phonemaster outside California for over four years due to the non-availability of connecting arrangements. De facto proscription continues to this date due to the excessive cost of those arrangements.
15. Touchtone Phonemaster The controversies over the ZZAGM in California and development of a Bell System arrangement left design criteria for a touchtone compatible Phonemaster unit up in the air. Phonetele was long delayed in finalizing that criteria with Bell System personnel, and could never be certain of its viability until March 1974 when the Bell System arrangements (CTH) were successfully installed at the New York Times. It has only been since then that Phonetele could make

a complete commitment to the development of a model Phonemaster that would work with touchtone installations. Delay in developing a touchtone Phonemaster due to AT&T's behavior has been an act of unfair competition.

16. Monrovia
School
District

Phonetele was the sole bidder (with a cash deposit) to provide a restrictor for the Monrovia School District. The three member school board, all members voting, tabled any action pending a quotation and availability of a new offering by General Telephone, represented to be forthcoming in several months.

It is an unfair marketing practice to interfere with a public bidding procedure by proposing, informally, equipment not yet available. The District is perhaps more at fault than General.

But, one of the voting school board members was an employee of General Telephone. General Telephone's role in this action is totally unknown but an element of unfair competition certainly exists. This occurred less than four months ago and the District still has no restrictor.

17. Call
Control

On two major occasions over the past several years, Pacific endeavored to offer "new" equipment competitive to the Phonemaster called Call Control.

In the first attempt prices were being quoted to customers, by letter, on equipment not yet available by committed delivery dates. The person representing himself to be responsible for setting tariff prices within Pacific Telephone said on the record that no rates had been established on Call Control, and admitted he did not know how Pacific's marketing people could be quoting prices that he was responsible to determine and had not. Such quotations were stopped by Pacific.

Approximately a year later Pacific proposed a tariff on Call Control which was deferred several times and finally withdrawn due to Phonetele's vigorous objections.

A competitive offering coupled with burdensome connecting arrangements is patently unfair, but such practices are commonplace.

It is important to note that the Call Control technology is old in character and has limited operational

features compared to the Phonemaster. Even so, it is formidable competition. People will accept less due to their fears.

18. Financial Problems

Starting a Company to introduce a new high-technology product is fraught with classic pitfalls. Venture capital has been virtually nonexistent and the prospects of a public offering under recent market conditions is practically nil. Add to all of these problems all of the past, pending and expected future litigation and the Company has dim prospects for funding. The telephone company is the coup de grace to any meaningful capital funding. Investment in interconnection companies is risky risk capital, though it need not be so.

19. Foregone Profits

Based upon scheduled price increases on July 1, 1974, Phonetele could have realized approximately an additional \$300,000 in revenues to date if the cost of connecting arrangements had not been previously absorbed in Phonemaster pricing. In addition to this last sum, Phonetele's progress in California would have been much more rapid were it not so impeded by the aforementioned unfair practices. Considering Pacific Telephone is one tenth of AT&T, Phonetele could have theoretically done ten times the business done in California were it not proscribed from doing business in other states. Treble these damages and there is a sizeable antitrust claim approaching \$30,000,000.

It should be obvious that \$300,000 additional revenue to a small company faced with a pessimistic financial community is of monumental importance.

Conclusion

The telephone utilities are imposing on their competitors defective, costly, and unnecessary protective connecting arrangements, in an unlawful manner, to protect their own earnings.

The telephone utilities are endeavoring to perpetrate their unlawful monopoly over the customer equipment market to protect their own earnings. They are endeavoring to achieve this by the aforementioned use of connecting arrangements, through unsupported claim of harm to the network, by predatory pricing practices on competitive offerings, and by endeavoring to hold the residential telephone subscriber hostage for further tribute.

While basic telephone exchange service remains a natural monopoly, the customer equipment business is not. Vertical services are not at issue; unlawful vertical monopolization is at issue. The extension of a natural monopoly, under franchise, to embrace Western Electric in one direction and the customer equipment market in the other, is not vertical service in the classic sense; it is monopoly at its worst.

There are a number of recommendations that follow:

1. Customer
Equipment
Market

The franchise of the telephone utilities should be confined to its natural monopoly of the local exchange network. It would appear that S1167 should not be necessary to accomplish this when the mere enforcement of existing antitrust laws seems more than adequate.

AT&T says that competition is artificial when AT&T is regulated and interconnect competition is not. There should be no regulation of the customer equipment market, rather the forces of free competition should regulate. But the telephone utilities should methodically divorce, over a stipulated time period, the entire customer equipment business. Spinning off the customer equipment end of AT&T (et al.) and allowing it to freely compete, would only create another monopolistic monster, that would still run afoul of existing antitrust laws. In the final analysis, the subscriber should own or rent his own equipment, buying or renting it from suppliers other than the telephone utilities.

While the telephone utilities would face a loss of earnings due to a loss of business, their efforts would then be concentrated on the network. Their demands on the capital market would be substantially lessened and this would have to be in everyone's interest. While the evolution of methodical divorcement may be a tearful experience to the shareholders, a taut and lean AT&T concentrating on improving its exchange service will certainly thrive, will afford the optimum guarantee of an ever-improving network, and in the final analysis will be in the best interest of the public. Under natural monopoly concepts, what is best for the public is best for AT&T, not the converse.

2. Western
Electric

In order to reduce its competitive power to manageable proportions, Western Electric should also be

caused to methodically divorce or severely reduce its manufacture and sale of equipment utilized in the customer equipment market. Of course, such equipment would no longer be sold directly to telephone companies because of their own divorcement of the customer equipment market.

"Western Electric manufactures more than 55,000 different items of communications apparatus and equipment" (SEC Form 10-K). This would certainly appear to offer considerable opportunity to analyze sound "spin-offs" or divorcements of certain segments of its business to reduce its force in the market place, and yet afford ample opportunity to allow it to continue to be a constructive corporate entity, whose continued existence, in some configuration, would serve the public interest.

Certainly the hold of AT&T management could and should be broken to allow free competition in the supply of other equipment to AT&T, et al. Even at that, further action no doubt would have to be taken to create an environment where other suppliers could fairly compete with Western for AT&T's other business, i.e., non-customer equipment business.

Western Electric could be "spun-off" into an independent corporate entity by a tax-free stock transaction where all existing AT&T shareholders received shares of stock in Western. This, of course, was the manner in which DuPont was compelled to divorce its holdings in General Motors.

3. Bell Companies

Additional tax-free stockholder exchanges should be mandated to reduce AT&T to a minority stockholder position with minority board representation in each of its subsidiary operating companies. This would break AT&T's management control and influence over the Bell System Companies. Instead of centralized thinking, decentralized management would allow for greater management creativity. The then truly independent Bell Companies would be competitive in the capital market and this would have to stimulate performance. If Western Electric didn't provide the best equipment, there would be no concern about buying elsewhere. Management careers would be focused on the independent company, and not on the mecca of 195 Broadway. Independent Bell Companies would be more responsive to individual state needs while still being structured to maintain its integration into a solid national network.

4. AT&T's Role AT&T would be reduced to a minority shareholder in the Bell Companies with minority influence, would retain its long lines operation in competition with the specialized common carriers, and would retain its interest in Bell Laboratories along with Western Electric (though this requires analysis).
5. Summary There are two fairly simple steps that can be taken.
- First, enforce existing antitrust laws to break the telephone utilities monopoly of the customer equipment market, and
- Second, effect the tax-free stock transactions with Western Electric and the Bell System Companies.

I appreciate the opportunity to make this statement to this Senate Subcommittee, and always stand ready to be of any further service. I completely support the purposes of these Hearings and certainly support the goals of the proposed Industrial Reorganization Act. I trust the Senate has the will to take timely action.



Robert L. Feiner, President
Phonetele, Inc.
June 25, 1974



Communication Certification Laboratory
SALT LAKE CITY, UTAH

11 March 1972

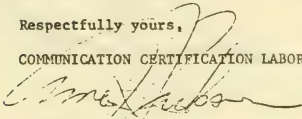
Mr. Robert L. Feiner, President
PHONETELE, INC.
15414 Cabrito Road
Van Nuys, California 91406

Dear Bob,

It is my pleasure to advise you that the Phonemaster 1040 is approved for certification. You are hereby authorized to use the CCL logo and reference in the manner indicated in the proposed copy handed to me the other day.

Respectfully yours,

COMMUNICATION CERTIFICATION LABORATORY


AMOS R. JACKSON
President



Communication Certification Laboratory
SALT LAKE CITY, UTAH

B-2

January 7, 1974

SUBJECT: CERTIFICATE OF COMPLIANCE

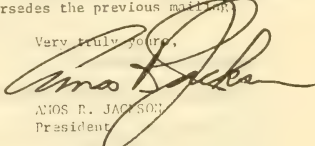
TO: THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA
AND
OTHER INTERESTED PARTIES

Gentlemen:

On January 5, 1974, the subject document was mailed out. It has become necessary to make a revision on item 11.3 on page 2 of the document.

In addition, a clarifying statement and a date has been added to page 3. This submittal supersedes the previous mailing.

Very truly yours,



AMOS E. JACKSON
President

In addition, other areas of concern, such as protection against the service degradation to network users that will result from the improper or marginally unsatisfactory performance of call restriction devices, the effect on costs and rates of telecommunication service, and problems of enforcement and administration, remain and must be addressed prior to the adoption of any program. However, given the time and resources available, and the magnitude of the problem presented, these questions could not be fully analyzed. G-2

We believe that the costs of any adequate certification program will be greater than the costs which customers would incur in connecting call restriction equipment through the connecting arrangements which we now offer in California. We also believe that certification of customer-provided equipment would adversely alter the costs, rates or rate structure of service to the public generally.

With these considerations in mind, we have concluded that a certification program for call restriction devices is not practical. In our judgment, a self-supporting program could not be developed, administered or implemented at reasonable cost which would produce the necessary service protection required for all users of the network.

Additionally, it is clear that questions relating to the connection of customer-provided equipment to the nationwide telecommunications network, which is an integrated system providing both interstate and intrastate services, require uniform State-Federal resolution. The Bell System is participating in the evaluation of certain certification program recommendations which will be placed before the Federal-State Joint Board* in order to obtain the necessary technical and economic data to determine whether such programs are a feasible alternative to the present tariff regulations governing the connection of customer-provided equipment. The interests of manufacturers of customer-provided equipment and their business customers should not prevail over the economic and service interests of the great majority of residence and business users, and the clear need to protect the network. In recognition of these facts, NARUC, an organization in which this Commission is a prominent member, has actively sought resolution of these questions through the Federal-State Joint Board. NARUC has

* In re Interstate and Foreign MTS and WATS (Docket 19628), 35 F.C.C. 2d 559 (1972).

It is this statement which reveals the fact that Pacific had sufficient knowledge of the Phonemaster to know that it would not work with the ZZAGM. Mr. Black continues (Page 472, line 27):

H-1

"As I remember, you displayed a card. I don't know that you described it in detail, other than a schematic you handed to me. I didn't examine it to determine if there is any harm or I didn't examine it to determine if there is a potential of harm."

Mr. Black continues (Page 488, line 5):

QUESTION

"But Pacific Telephone has not observed some problems in the installation in their areas?"

ANSWER

"Not to my knowledge."

Mr. Black further stated (Page 481, line 16):

QUESTION

"So what you have characterized are the theoretical points of harm, yet no actual observation has been made of such conditions?"

ANSWER

"I think that is a correct statement."

IX. PACIFIC WRONGFULLY INTERPRETS
ITS OWN TARIFF DEFINITION

There is no basis of argument by Pacific that a mere terminal block does not satisfy F.C.C. Tariff No. 263 (and 136-T) inasmuch as Paragraph 2.5 - "Definitions" defines a connecting arrangement as follows:

"The term 'connecting arrangement' denotes the equipment provided by the Telephone Company to accomplish the direct electrical connection of customer-provided facilities with the facilities of the Telephone Company." (Underline added).

The American Telephone and Telegraph Company itself issued a similar definition in the following source:

BELL SYSTEM
TECHNICAL REFERENCE .

PUB 42101

H-2

Voice Connecting Arrangement QKT
Interface Specification

Revised June, 1971

Appendix A GLOSSARY

"CONNECTING ARRANGEMENT - equipment provided by the Telephone Company to accomplish the electrical connection of customer-provided equipment and the telecommunications network." (Underline added).

Providing a simple terminal block interconnecting arrangement will certainly suffice to satisfy the federal tariff even if the tariff is in the final analysis held to be legal.

Mr. Aschoff in his testimony defined a connecting arrangement (Volume 9, Page 865, line 3):

"The definition in 36-T reads as follows:

'Connecting arrangement denotes the equipment provided by the Utility to accomplish the direct electrical connection of customer-provided facilities with a facility of the Utility'." (Underline added).

But Mr. Aschoff expands this definition by his own non-literal interpretation of the tariff (Page 866, line 21):

"So the words 'connecting arrangement' in my terms and in the terms of the people who wrote the schedule were intended to describe an assembly of protective apparatus that would be provided by the telephone company."

He takes license to redefine a connecting arrangement presumably because of his prior stated qualification to do so (Page 866, line 6):

"First of all, I would like to say that Tariff Schedule 135-T was prepared under my direct supervision by people on my staff and I was personally involved in a great deal of the preparation."

He is so uncertain as to his right to redefine a connecting arrangement that he is most emphatic in his allegation (Page 867, line 8):

"I think it is very, very clear as to what a connecting arrangement is and it is very, very clear that it is a protective device."

H-3

All of this non-literal interpretation of the definition of a connecting arrangement is in spite of his purported literal approach to the tariffs as previously stated (Volume 8, Page 790, lines 6-17, as cited on Page 12 of this Brief).

In further testimony there are two definitions from Tariff 263 which were cited to Mr. Aschoff (Pages 868 and 869) as follows:

"Connecting Arrangement

The term 'connecting arrangement' denotes the equipment provided by the Telephone Company to accomplish the direct electrical connection of customer-provided facilities with the facilities of the Telephone Company.

Data Access Arrangement

The term 'data access arrangement' denotes a protective connecting arrangement for use with the network control signalling unit, or in lieu of the connecting arrangement, an arrangement to identify a central office line and protective facilities and procedures to determine compliance with criteria set forth in 2.6.4(A)(3)(b) of this tariff."

The point was made that these are the only two types of connecting arrangements cited, the latter containing the specific additional term "protective" while the former does not. One can only conclude therefore, from a literal interpretation, that the connecting arrangement at issue in this proceeding is not required to be protective in nature. Phonetele is comfortable in the literal reading of the tariffs because a terminal block will serve quite well as a connecting arrangement as defined in the tariff. Phonetele does not need to seek refuge in the principal of the "just and reasonable" test of the tariffs. It needs only to seek such refuge from the license that Pacific takes in its non-literal interpretations that see Pacific ignoring the conditions of its own tariffs and ignoring the definition of a connecting arrangement. It is Pacific who is violating its own tariffs. It is Pacific who must justify why a complicated connecting arrangement should be required. It makes no effort to do so. It merely imperiously states what the arrangement should be and abuses its power by wrongfully issuing disconnect notices to enforce its will.

When these differences of definition were pointed out to Mr. Aschoff the following discussion ensued (Page 869, line 1):

QUESTION

"But it was very obvious in the second definition that the word 'protective' had to be in there for more clear definition."

"Why doesn't the definition of connecting arrangement read, 'The term connecting arrangement denotes the protective equipment,' as opposed to merely reading, 'The term connecting arrangement denotes the equipment'?"

ANSWER

"After going through this particular set of questions on cross-examination I wish we had done it even though I don't feel it was necessary at the time."

X. COMMUNICATION CERTIFICATION
LABORATORY COMMENTS ON "HARM"

Mr. Amos Jackson, President of Communication Certification Laboratory was queried on the Phonemaster 1040 and following are a series of comments (Volume 8, Page 757, line 28):

"I see no problems in getting the Phonemaster 1040 certified under the procedures that have been here outlined."

On Page 758, line 4:

QUESTION

"In your inspection of the Phonemaster 1040 have you found any information or have your tests given you any cause for belief that the 1040 would be harmful to the telephone network?"

ANSWER

"I have found no such indication that there could be any harm created."

On Page 758, line 15:

"As we discussed I believe it was under cross-examination the other day, there is the question of the UL approval on the power supply, that pre-

and the other being for the certification of automatic dialers and answering devices. The Phonemaster 1040 is a device which allows a telephone system to be programmed to allow or disallow dialing predetermined area codes or prefixes on selected trunk levels; it will also work with key telephone systems. Neither of these committees seem to promise resolution of the issues in Phonetele's cases before the Commission.

XV. P. U. C. STAFF RECOMMENDATION

K-1

Phonetele endorses and recommends that the staff position be adopted. Though the testimony and recommendation contained in Exhibit 43 and the testimony contained in Volume 11 is lengthy, Phonetele's most simple statement is that it concurs with the staff. The method proposed seems most viable, practical, reasonable, and equitable to all concerned.

XVI. UNFAIR COMPETITION

1. CONNECTING ARRANGEMENTS

It is Phonetele's contention that the real motives of Pacific Telephone and General Telephone are to forestall competition. Phonetele believes that the issues of competition are most adequately stated in the aforementioned Strassburg letter and the Department of Justice Petition. Mr. Strassburg recently declared that:

"interconnection on a nationwide basis is already here via carrier-provided connecting arrangements. The principal question which remains is under what conditions can interconnection safely be permitted without the requirements for those arrangements in view of the competitive disadvantages they impose on non-carrier suppliers..." (TELECOMMUNICATION REPORTS, Volume 38, No. 7, Page 3, February 27, 1972).

2. UTILITY CHARGE

The right of the customer to backcharge the utility when he is charged for visitations by outside manufacturers who respond to problems which are problems of the utility should be acknowledged. This in essence is the right of a company such as Phonetele to effect the right to make

charges in the same way that the utility charges \$10 for visitations due to customer provided equipment failures. If the utility did make such a charge it is arguable that the customer should be able to charge Phonetele \$10 accordingly. If Phonetele charges the customer \$10 that customer should be able to backcharge the utility. K-2

Probably the biggest competitive argument and a matter of great concern is the service to be provided by outside manufacturers. Service is a great issue. The very unique problem that Phonetele has uncovered is that it is constantly confronted with telephone company equipment which is not working properly. These problems are very frequently not known by the customer even though the problems are working to his detriment. Attention is called to one of the most important exhibits in this case and that is Exhibit 48 which is a letter from Phonetele to Collins Foods which outlines the extensive difficulties encountered with General Telephone's new installation at Collins Foods. It is problems such as these which mandate the right to effect backcharges to the utility. Maintaining the status quo in this issue is certainly inequitable, if in fact, not illegal. It is certainly a question of unfair competition by affording the utilities an economic advantage.

3. PACIFIC'S "NEW" TOLL DIVERTER

Phonetele submitted certain exhibits attesting to certain unfair business practices of Pacific; those exhibits follow:

A letter from Pacific Telephone dated January 13, 1972, signed by Mr. Milton Morris	Exhibit 32
A letter for Pacific Telephone dated December 27, 1971	Exhibit 33
An Affidavit from Lewis H. Shaefer	Exhibit 34
An Affidavit from Paul E. La Plante	Exhibit 34

It is Phonetele's contention that Pacific Telephone is unfairly competing by representing the availability of a product not yet in existence and not yet tarified. Pacific has not yet been able to clearly state the relative capability of its equipment while representing a cost to the customer for its toll diverter. It appears to the prospective customer

reasonable is to try to be as certain as possible that we have all of the facts involved in the particular situation and apply those to the tariff and ask ourselves is it reasonable and is it proper for us to apply this particular tariff to this particular situation. In other words, is the tariff applicable to this situation for certain. Not to be hasty in our actions but to get as much information as we can before we go to the tariff and say is this particular tariff provision applicable in this situation."

VII. PACIFIC DID NOT MEET THE
TEST OF ITS OWN TARIFF

Notwithstanding these remarks the actual events involved in issuing disconnect notices to Swett and Crawford did not reconcile with this stated position. Mr. Aschoff indicated that while he delegates responsibility he has ultimate responsibility which was revealed by the following testimony (Volume 8, Page 789 line 13):

ANSWER

"All company employees are required to administer the tariff."

QUESTION

"But you have overall supervision?"

ANSWER

"If there is a question in their mind as to whether the tariff is applicable in a particular case, which would be very rarely, then it would be referred to my department."

QUESTION

"That means you have ultimate responsibility?"

ANSWER

"Yes."

Having reaffirmed his responsibility generally the testimony proceeded to the specific cases involved (Page 794, line 17):

QUESTION

"Are you aware of the fact that disconnect notices were issued to Wally Heider and Swett and Crawford?"

ANSWER

"I am aware that they were issued."

administration of the tariffs. The current Pacific Company tariff schedule which provides for connection of customer-provided equipment to Pacific Company facilities was prepared under my supervision."

L-2

As the responsible party in Pacific for interpreting and administering the tariffs the following interchange took place on the principle of "just and reasonable" application of the tariffs (Volume 8, Page 790, line 6.):

ANSWER

"Well, I would say, first of all, there is no provision in the tariff for us being just and reasonable. We are required to act in accordance with what the tariff provisions are, otherwise I understand that we could be subject to some quite severe penalties."

QUESTION

"So, just and reasonable is not a part of your judgment, just a literal reading of the tariff?"

MR. FICK:

"Was that a question?"

MR. FEINER:

"Is that a correct statement of your position?"

THE WITNESS:

"I guess I would have to say, technically, yes."

Later in his testimony Mr. Aschoff expanded upon his remarks to the extent (Page 835, line 27):

"In the previous answer to your question the point that I was trying to get over is that there is nothing in the tariff that says that the telephone company can use reason, judgment or anything else in the application of the tariffs."

On the following day's testimony, presumably after some reflection Mr. Aschoff had some additional thoughts on the "just and reasonable" principle (Volume 9, Page 848, line 19):

"Well, in trying to decide what actions to take, I think that my view on being just and

Page 5 states the following:

"Such general prohibitions are open to serious question under Paragraph 201(b) of the Communications Act (47 U.S.C., Paragraph 201(b) which requires that all carrier tariffs and other regulations be 'just and reasonable'."

L-3

It is Phonetele's contention that the complicated and costly interconnecting arrangements being demanded by General and Pacific are not "just and reasonable". Notwithstanding the Department of Justice above cited position "that all carrier tariffs and other regulations be just and reasonable", Mr. Morris, the legal counsel for Pacific stated (Volume 6, Page 543, line 24):

"Certainly the tariffs in this matter have been filed and have become effective according to the normal process of the Commission. We do not regard ourselves as having a burden to show that they are reasonable. They are presumed reasonable unless and until shown otherwise. And it is Mr. Feiner's burden to demonstrate on the record by evidence any claimed unreasonableness or unlawfulness."

It is typical of the imperious attitude of Pacific that Pacific is some "super state" within a state, bound only by what it chooses to be bound by, arrogating to itself the right to ignore federal law, its own filed tariffs, and Commission Orders, as it will later be shown.

On the philosophy of "just and reasonable" Mr. Fick remarked (Volume 4, Page 279, line 8):

"Commenting briefly on the complaint and the Answer by PT & T, I disagree with Mr. Morris that the tariffs of Pacific Telephone -- of PT & T are not an issue here as to whether they are unreasonable or unlawful."

Mr. Aschoff testified as Pacific's expert on tariff matters specifically stating in his direct testimony (Page 1. of Exhibit 25) as follows:

"My present title is General Pricing Director in General Administration. I have companywide responsibility for the development, interpretation, and

Crawford and Wally Heider Recording and Phonetele filed a formal complaint with the Commission. As in the General case, Phonetele took exception to the interconnecting arrangement being demanded by Pacific.

L-4

VI. BURDENS OF THE CARRIER

It is Phonetele's position that the utilities cannot be arbitrary in their insistence on an interconnecting arrangement more complicated than a simple terminal block. The Department of Justice opinion takes the position that the utilities have burdens as stated on Page 8, Exhibit H, attached to Phonetele's "RESPONSE" to Pacific's "PETITION TO MODIFY" as follows:

"Unless the burden is thus placed on the carrier to justify such a general prohibition, it is difficult to see how the Hush-A-Phone principle can be meaningful."

On Page 5, the Department of Justice also states the following:

"First, we are dealing with a situation where (as more fully shown below) the burden is on the carriers under the Communications Act to establish the need for a general tariff prohibition of the type involved."

Though these quotations are out of context, a thorough reading of the opinion will clearly indicate the Department's position that the utility has a burden to show harm. Even the DITBERNER ASSOCIATES report which was cited in Pacific's PETITION TO MODIFY (attached as Exhibit P, in Phonetele's "RESPONSE" to Pacific's "PETITION TO MODIFY") states on Page 120, Paragraph 3., the following:

"The common carrier assumes, under our recommendation approach, the burden of proof that equipment is, in fact, harmful to the network."

Pacific has made no effort of any kind to show that the Phonemaster 1040 is harmful. Their approach has been one of arbitrarily insisting upon their own complicated and costly interconnecting arrangement without assuming any burden to demonstrate why anything more than a simple terminal block interconnecting arrangement should be required. This is certainly a disservice to the customer. The Department of Justice at the bottom of



INC.

M-1

CERTIFIED MAIL

October 2, 1973

Mr. William R. Johnson, Secretary
Public Utilities Commission
State of California 340 McAllister Street
San Francisco, California

Dear Mr. Johnson:

Certain practices of Pacific Telephone and General Telephone have reached such serious proportions that it is now necessary that we take issue with them, as follows:

1. TOUCHTONE

Pacific's tariffs do not discriminate in pricing between dial tone and touchtone service in connection with their diverting equipment. Notwithstanding this fact, it is our understanding that additional hardware must be employed with their diverting equipment when touchtone capability is provided.

Per the attached series of letters, we have endeavored to determine the exact facts in the matter, and to no avail. One letter from Pacific does, however, verify the fact that additional hardware is required.

This particular situation arose at Cedars-Sinai Medical Center and may be foreclosing our ability to consummate a sale of a dial tone compatible Phonemaster. It should be pointed out that the Phonemaster does not work with touchtone unless tone-to-pulse converters are used.

If tone-to-pulse converters are being provided with Pacific's diverters at no charge to the customer, then we could ask why they should also not be provided free of charge with the Phonemaster. We won't ask that question. It is more sensible to ask if Pacific has a valid reason for foregoing charges other than unfair competition.

It is our view that this is a flagrant example of unfair competition. It is our view that the Commission should cause it to be stopped immediately. Attached is a "TEXT OF RULING IN IBM - TELEX CASE." This ruling is quite pertinent to our argument here as it follows current thinking in anti-trust matters. Editorial liberties have been taken to insert Pacific's name to key wording and specific note should be taken of paragraphs 4., 5., and 6.

Mr. William R. Johnson, Secretary
Public Utilities Commission

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2. BASIC TERMINATION CHARGES

We have long been of the opinion that basic termination charges cannot be justified by a monopoly telephone company that purports to be selling a "service" and not hardware itself. It is obvious that BTCs solidify Pacific's hold on the market place.

We believe there are many prospective customers who would purchase the Phonemaster if it were not for the excessive BTC penalties. One government entity, a present customer, has approximately a dozen locations that would be considered were it not for the BTC. The taxpayers would be the beneficiary.

We believe that Pacific's hold on the market place should be broken. We believe it is the customer's basic right to be able to obtain the equipment of his choice. We believe he should be able to obtain the very best equipment available and we believe it to be the Phonemaster. (We also believe that he should have the choice of purchasing it from us or obtaining it from the telephone companies, and for that reason it has been our long-standing position that our equipment is available to the telephone companies to provide the customer.)

Once again, we direct the Commission's attention to the Telex Ruling, paragraphs 2. and 6.

3. BASIC MARKETING PRACTICES

We believe that it has been and still remains to be the telephone companies' practice that diverting equipment be offered on a demand basis only, i.e., no concerted effort is ever made to inform or sell the subscriber restriction equipment to our knowledge. We believe this is true because such equipment lessens the telephone companies' revenue and, therefore, it is directly contrary to their own financial interest.

The Phonemaster is a specialized solid state mini-computer. It works with PABX or KTS installations. If Pacific and General had properly met monopolistic carrier responsibility, they would have designed and provided such equipment five years or longer ago. They did not. They continue to provide truly archaic technology. They provide nothing that works with key systems. We have long been of the opinion that the telephone companies have accrued a very substantial liability to their customers for wrongfully failing to provide effective service, and thereby could justifiably be called upon to rebate misuse incurred over many past years, such a redress of grievance being pursued in the form of a class action suit.

Today, CO centrex users desire and are denied the use of effective restriction service because they cannot purchase our equipment and install it in the telephone company's central office. We have just completed the installation of an

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Public Utilities Commission

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eight level, 196 trunk installation at the County of Los Angeles USC Medical Center. This system cost approximately \$50,000 and the taxpayers will pay for it in a matter of a few months by their more efficient system. This system is more efficient for Pacific's network, and they too were incurring needless additional cost by inefficient trunking to serve this facility. This facility plans a CO centrex system in approximately one year and the County will no longer be able to use the Phonemaster there unless other arrangements are made. Within that year, the Phonemaster will have paid for itself several times and it is the tentative plan to "break it down" into smaller units and re-install it in other County locations, if possible.

A dramatic example of this "demand basis" policy took place recently at Cedars-Sinai Medical Center. With two Pacific Telephone Company representatives present, the customer revealed that approximately \$200 was being wasted on foreign exchange trunks on long distance calls. There was no response from Pacific personnel. After a moment of silence, Mr. David L. Rich, Phonetele's Vice President of Marketing, asked why Pacific did not provide a simple Dial "1" restriction. After another moment of embarrassed silence, a Pacific representative left the room, returned, and reported that it would be installed in several days.

We believe that such negligence based upon an established marketing policy is unconscionable. Cedars-Sinai is a non-profit hospital. Condoning such misuse is pure banditry. We believe that Cedars-Sinai and all such other customers should be rebated for such past misuse.

To resolve these inequities, we respectfully request that the Commission at the earliest date do the following:

1. To terminate an unfair business practice, issue a cease and desist order against Pacific Telephone's providing additional hardware with exchange and toll message diverting equipment at no charge when it is being converted from dial pulse to touchtone.
2. To allow the subscriber freedom of choice, issue a cease and desist order against Pacific from enforcing or collecting any basic termination charges on any telephone equipment which it might otherwise be entitled to collect because of termination, upon ninety days notice.
3. It being in the public interest to encourage competition and provide the customer the best service available, order Pacific Telephone and General Telephone to provide Phonetele and other exchange and toll diverting equipment manufacturers a list of Pacific and General's present diverter users, that the customer may have the opportunity to make the very best equipment selection to serve his purpose.

Mr. William R. Johnson
Public Utilities Commission

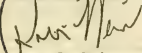
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4. The subscriber being entitled to the very best service available, order Pacific Telephone and General Telephone to immediately make available in CO centrex installations exchange and toll diverting equipment of a type at least cost and performance equivalent to the Phonemaster should the customer request it.
5. To facilitate more economical telephone systems for the subscriber and facilitate a more economical network for the telephone companies, order Pacific and General to institute positive marketing efforts to provide exchange and toll diverting equipment to all of its business customers, whether PABX installations or key systems.

Sincerely,

PHONETELE, INC.



Robert L. Feiner
President

RLF:jan
Enclosures with All

cc: Mr. Art Latno
Vice President, Pacific Telephone

Mr. Norm Phillips
Assistant Vice President,

Milton Morris, Esq.
Pacific Telephone

Donald Duckett, Esq.
General Telephone

Rick Stein, Esq.

Mr. Bernard Strassburg
Federal Communications Commission

Mr. James Hellerman
U. S. Senate Judiciary Anti-Trust Committee

Mr. James F. Holmes
North American Telephone Association

Text of Ruling in IBM — Telex Case M-5

TULSA — Here is the text of U.S. District Judge A. Sherman Christensen's "Judgment and Decree" for the IBM Telex case.

JUDGMENT AND DECREE

The issues having been duly tried to the court, findings of fact having been made, and conclusions of law having been entered, now, accordingly,

IT IS HEREBY ORDERED, ADJUDGED, AND DECREED:

1. **THAT PLAINTIFFS**, The Telex Corporation and Telex Computer Products, Inc., have and recover judgment of and from the defendant International Business Machines Corporation in the sum of \$352.5 million, after the found actual damages have been trebled as required by law, together with costs and attorneys' fees, the amount of such attorneys' fee to be reserved for future determination.

PACIFIC

2. **INTERNATIONAL BUSINESS MACHINES Corporation** is hereby permanently enjoined from enforcing or collecting any contractually specified penalty payments which it otherwise might be entitled to collect because of termination upon ninety days' notice, of any long term lease agreements heretofore entered into between IBM and any of its end-user customers, including but not limited to IBM's Fixed Term Plan leases, Extended Term Plan leases and Term Lease Plan leases. For a period of three years from and after the date of this judgment International Business Machines Corporation is enjoined and prohibited from including in any lease agreement for electronic data processing products for terms in excess of 90 days any provision requiring payment of any liquidated damages or penalty because of the customer's earlier termination of said lease agreement.

3. **AT THE TIME** of a product announcement concerning any EDP product, or at the time of release of such product for manufacturing and production, whichever first occurs, International Business Machines Corporation is enjoined and required to publicly describe and disclose the design of the electronic interface for such product in sufficient detail as to make feasible the reproduction of such interface by other qualified manufacturers; and within 60 days from the entry of this judgment, International Business Machines Corporation shall similarly describe and disclose the details of the design of the electronic interface for each System 370 EDP peripheral product that it has announced heretofore.

PACIFIC

4. **INTERNATIONAL BUSINESS MACHINES Corporation** is enjoined and prohibited from single or "bundled" pricing of IBM memories with its System 370 central processing units, that is, from charging a single price for both the central processing unit and the memory, and within 60 days IBM shall separately price its CPU's and memories. This does not prohibit, restrict or enjoin International Business Machines Corporation from selecting any particular physical locations or packaging of its products so long as these requirements and those stated in the next succeeding paragraph are followed.

PACIFIC

5. **INTERNATIONAL BUSINESS MACHINES Corporation** is enjoined and required to separately price its functionally different products, including but not limited to central processing units (CPU's), memories, tape products and their controllers, disk products and their controllers, printer products and their controllers and communication controllers regardless of whether it elects to place such products in single cabinets or in multiple boxes or cabi-

nets. International Business Machines is further enjoined and required to set its prices for all such functionally different EDP products by using or applying a substantially uniform percentage mark-up over actual designing, manufacturing and marketing costs as between such integrated and separately boxed products.

6. **INTERNATIONAL BUSINESS MACHINES Corporation** is enjoined from adapting, implementing or carrying out predatory pricing, leasing or other acts, practices or strategies with intent to obtain or maintain a monopoly in the market for EDP peripheral equipment plug compatible to its CPU's or any relevant submarkets thereof.

7. **INTERNATIONAL BUSINESS MACHINES Corporation** shall have and recover from Telex Corporation and Telex Computer Products, Inc., the total sum of \$21,913,776, made up as by the Conclusions of Law shown, together with costs and attorneys' fees in connection with its copyright claim to be hereinafter fixed.

8. **TELEX CORPORATION** and Telex Computer Products Incorporated are enjoined:

a. To return to IBM all IBM documents and all Telex documents containing IBM confidential information which are in Telex's custody or under its control, and to destroy all copies of Telex manuals under its control or in its custody which infringe IBM copyrighted manuals.

b. To refrain from hiring or soliciting any IBM employee for a period of two years without approval from the court.

c. To refrain from copying any IBM copyrighted materials.

d. To refrain from soliciting or using any IBM confidential or proprietary information.

e. To refrain from assigning any former IBM employee employed now or in the future by Telex to the development or manufacture of products functionally equivalent or similar to those on which such employee worked at IBM for a period of not less than two years following the termination of his employment with IBM.

9. **EXCEPT FOR THE FIXING** of the amounts of attorneys' fees and costs to which the respective parties are entitled, the court pursuant to Rule 54(b) Fed. R. Civ. P. determines that there is no just cause for delay in the entry of this judgment, and the clerk is hereby directed to enter final judgment in accordance with the foregoing forthwith on all issues except as to the amounts of the attorneys' fees, which shall be covered by supplemental judgment, there being hereby granted a stay of execution until the disposition of the post-trial motions hereinafter mentioned, or until the court otherwise orders.

10. **FOR THE PURPOSES** of fixing the amounts of said attorneys' fees, considering any motions filed within ten days of the entry of this judgment for correction of the findings of fact, conclusions of law and judgment pursuant to Rule 60(a) Fed. R. Civ. P., or to amend findings and judgment pursuant to Rule 52(b) Fed. R. Civ. P., or to alter or amend judgment or for a new trial pursuant to Rule 59(a), (e), Fed. R. Civ. P., a hearing will be held at the United States Courthouse, Tulsa, Oklahoma, on October 16, 1973, beginning at the hour of 10 o'clock a.m.

Dated this 14th day of September, 1973.

/s/ A. Sherman Christensen
Senior United States District Judge
(Assigned)

Medical Center Saves over \$30,000/Month on Phone Bill

N-1

By Kenneth M. Bourne

Managing Editor

How would you like to save over \$30,000 every month on your telephone bill? That's how much is now being saved on the County of Los Angeles University of Southern California Medical Center's telephone charges which, until recently, amounted to \$112,000 per month—\$42,000 for fixed equipment and \$70,000 for usage.

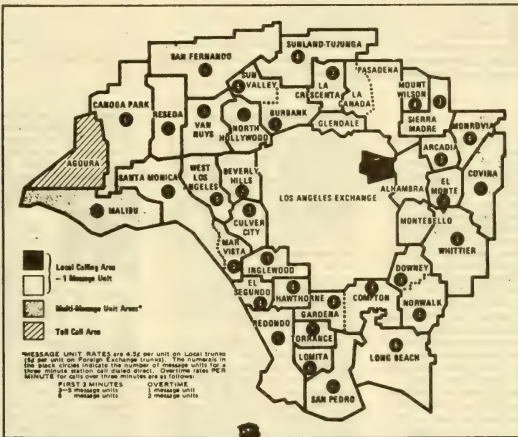
The medical center has managed to chop away more than a third of its monthly telephone charges with the largest privately owned call-restriction system in the United States, recently installed in the center's telephone equipment room by Phonetel, Incorporated. The \$50,000 Phonester system (installed in September and, after less than two months, has paid for itself) controls 196 telephone

trunk lines and eight trunk groups, including seven foreign-exchange groups.

The LAC/USC Medical Center is known throughout the world as a leading research and treatment center for critical diseases such as cancer and injuries such as severe burns and spinal damage. The medical center has many well-known specialists in diverse fields—even including poisonous snake bites. Large grants are given to many prominent researchers at the center. This large facility, covering approximately 84 acres, with over 20 buildings (including temporary structures) and between 9,000 and 10,000 employees, requires an extensive telephone communications system for internal calls and calls going all over the United States and to Korea, Australia, Europe, and many other points throughout the world. Doctors and re-

searchers at the center frequently have need to consult via telephone with other hospitals, medical centers, government institutions, other researchers, and so on, in New York, Chicago, and elsewhere. People in the medical center's purchasing department also have frequent need to make long-distance calls.

Anyone making a long-distance call must be authorized to do so. Administrators of the various hospitals at the medical center have authorized the operators to place calls only for certain individuals. The calls are not to be dialed directly by the individual. If an unauthorized person wishes to place a long-distance call, he must go through someone who is authorized. Before the Phonetel equipment was installed, unauthorized long-distance calls could be made without detection, until the huge telephone bill arrived. Now, calls outside the 213 area



Local calling, multmessage unit, and toll-call areas for LAC/USC Medical Center, based on local and nearby dialing area map provided by Pacific Telephone.

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Local and foreign-exchange areas for LAC/USC Medical Center. By using seven foreign-exchange trunks, each call costs only one five-cent message unit.

Seven Foreign-Exchange Trunks

code will not go through without operator assistance.

Seven types of foreign-exchange trunks are used to cover the 213 area. Every station user has been issued printed instructions on how to dial his calls to specific areas, so that the proper foreign-exchange trunk is utilized and multimessage unit charges are eliminated. The instructions list every prefix in Los Angeles County, with appropriate dialing instructions. However, all users do not follow the instructions perfectly at all times, and, therefore, it became necessary to find a way to route their calls into the proper foreign-exchange trunks, and to restrict any multimessage unit calls from being made. The Phonetele Phonemaster 1040 was the answer.

Now, every call that is made anywhere in the 213 area is treated as a legitimate call, and costs only one five-cent message unit. Calls outside the 213 area will not go through, and the caller must place his call through the operator, if he is authorized to do so.

Jim Pickles is the medical center's telephone services analyst, and works for the County of Los Angeles, Department of Communications. Pickles has worked for the county for 10 years, and took charge of telephone communications at the medical center on December 1, 1972. When Pickles came to the center, he found that they had just one big telephone bill each month. He was unable to tell what was going out on the ninth level and what was going out through the operators. So Pickles asked the telephone company (Pacific Telephone) to render separate bills.

All ninth-level trunks were billed separately from the switchboard. Then Pickles could see what was going out through the operators and what was going out DDD. Since January 1973 he has recorded, month by month, all charges according to equipment, long distance, and multimessage units. "The figures were unbelievable," says Pickles. Multimessage unit charges averaged about \$31,000 per month. The figures for long-distance

calls going out on ninth-level trunks averaged \$36,000 per month. Pickles was unable to determine what portion of this amount was for legitimate calls. He had to wait until the Phonetele equipment was installed before he could find out what the cost is per month for authorized calls through the operators.

When Pickles first came to the medical center, there was no foreign-exchange trunking. He decided to make a study of multimessage calls to help him determine the most efficient configurations for such trunking. Pacific Telephone provided him with IBM cards for the calls for October 1972, which he sorted numerically, by prefix. The number of calls to each prefix in the 213 area was then plotted into the appropriate exchanges throughout Los Angeles County, using a map provided by the telephone company. (Pacific Telephone provides maps in their telephone directories to inform subscribers what their costs are for calls to certain areas.) Pickles discovered that he could add another level of trunks far less expensively than taking calls in one area

and putting them into another, and paying the additional message units. From his figures, he was able to come up with foreign-exchange trunking configurations to provide one-message-unit calling areas.

Pickles also considered total talking time, so that he would know not only how many calls were made to a certain exchange, but also how long each call lasted, on the average. From his study, Pickles determined that the average holding time (duration from the time the receiver is lifted until hang-up) varies from 3.6 to 4.3 minutes. He then estimated the number of trunks required (at a cost of \$150 to \$160 per month). With this information on average holding times and trunking quantities, he could tell Phonetete how many trunk cards he needed, with the addition of seven levels of foreign-exchange trunking for multi-message charges.

On March 19, 1973, Pickles ordered the foreign-exchange trunks, as well as the interfaces, from Pacific Telephone. On May 1, he started writing the specifications for the restrictor, because he knew it would take longer to get all the foreign-exchange trunks than it would to get the restrictor. The specifications were let out to purchasing so that anyone who could meet the specifications could submit a bid. On June 5, the go-ahead was given to Phonetete for their equipment. Phonetete took only five days to complete their installation.

The bills for October 1973 were for the first full month of operation with the Phonemaster 1040, and amounted to \$33,000 in message units and long-distance charges, or a savings of \$37,000 per month from the previous \$70,000

usage charges. However, the monthly base rate increased by \$7,000 (from \$42,000 to \$49,000) because of additional fixed equipment and trunk groups, so the overall savings per month is \$30,000. This amounts to a savings of \$13,000 per month in multmessage units with the Phonetete equipment, as well as a savings of \$17,000 per month in unauthorized long-distance abuse. Thus, the \$50,000 Phonetete system has paid for itself in less than two months!

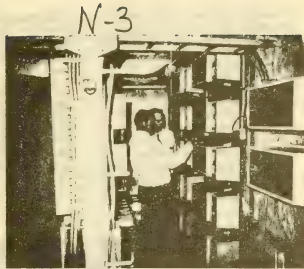


Jim Pickles, LAC/USC Medical Center telephone services analyst, examines a large rack of Pacific Tel interconnect devices for connecting the Phonetete equipment to 40 telephone trunk lines. Five of these racks are used for all 196 lines, taking up more space than all 14 Phonemaster cabinets.

The county paid the entire \$50,000 for the Phonetete equipment. In a more common situation, a company might pay \$10,000 for equipment to fit their requirements, and save \$1,000 per month. If they buy the unit on a five-year lease, they are paying about \$225 per month, and saving \$1,000 in charges, resulting in a cash-flow savings of \$775 per month more for the company. This would not be considered just profit and loss but really would be cash flow, because nothing is being taken out of the company's "pocket" to buy the equipment. They are just taking back the misuse and applying a certain amount to the equipment. On a five-year lease at \$225 per month, about two-thirds is equity build-up and one-third is cost of the money.

Multilevel Solid-State Restrictor

The Phonemaster is more than just a mechanical long-distance-toll restrictor. It is a sophisticated solid-state restrictor that addresses itself to the medical center's eight levels of trunking. Consisting of 14 cabinets, measuring about 1 foot by 1 foot by 3 feet each, the equipment at the medical center includes 196 trunk cards and sufficient memory to address itself to the eight programs required. Calls are allowed or disallowed according to the equipment's analysis of the first three digits dialed.



In the LAC/USC Medical Center telephone equipment room, Telephone Services Analyst Jim Pickles (left) shows the 14 Phonemaster cabinets to CN Managing Editor Ken Bourne. The equipment includes 196 trunk cards and sufficient memory for the eight programs.

The Phonetete equipment is wall-mounted in the medical center's telephone equipment room. It is connected on Pacific Tel's central office side of the outgoing trunk equipment on the medical center's premises.

When an incorrect call is attempted, the call is restricted and diverted to an audible signal of four tone pulses. The operation is automatic. No operators or additional personnel are required.

The equipment is compatible with both KTS and PABX telephone systems, and works with telephone-company or interconnect-company systems.

In general, the Phonemaster 1040 can restrict dial "1" access, or limit calling to the local area code and allow long-distance information and toll-free (800) calling. It can be provided with an optional program control switch to lift restriction for placement of authorized long-distance calls. That is, selected prefixes or area codes can be "shut down" or "opened up". In addition, it can restrict calls to selected prefixes within other area codes.

The Phonemaster 1040 has the facilities for programming different trunk groups, such as local trunks, foreign-exchange trunks, WATS lines, and tie lines, to enforce proper use.

The equipment has optional six-digit programming capability, within system constraints. For example, calls

to specified prefixes within specified area codes can be allowed or restricted, or six (of seven) digit numbers within a local area code can be allowed or restricted. It can be programmed to restrict long-distance calls only if "555" (Directory Assistance) does not follow the area code.

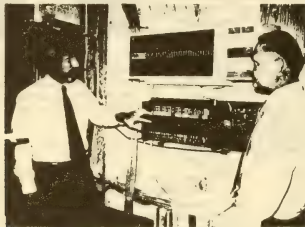
Not all of these features are utilized by the medical center. One feature not used is the six-digit capability. Another capability not utilized is the one which allows long-distance information calls and "800" inward WATS calls to be made on local trunks, while

disallowing call charges. Conversely, those free calls are not allowed to be made over expensive foreign-exchange trunks.

The Phonemaster 1040 passively monitors telephone dialing, by which it is activated, and does not require a signal from a PBX or key telephone system to activate it before it can begin counting dial pulses. The equipment multiplexes among the monitored trunks, counts dial pulses, and stores the digits.

Restriction control is applied to a set of numbers in the following sequential manner: (1) recognition or rejection of a single-digit access code, and all digits thereafter; (2) allowance or disallowance of the next three digits dialed (such as an area code), and all digits thereafter; and (3) allowance or disallowance of the subsequent three digits (such as the three-digit prefix of a seven-digit telephone number).

Independent control is provided for different trunk groups. The equip-



Phonetele President Bob Feiner (left) and LA County's Jim Pickles examine trunk cards in a Phonemaster 1040.

N-4

ment is modularly expandable and field reprogrammable, and features alternate program availability and control.

Pickles has been able to evaluate traffic by the visible light-emitting diodes for each trunk, mounted on each trunk card and visible through the front panel of each unit. The LEDs show what is happening (such as dialing or restricting) and what trunks are being used.

Not Obviously Available from Telco

Pacific Telephone does not offer Phonemaster type equipment as a tariffed item. All they offer is Stromberg-Carlson equipment which takes up much more floor space than the medical center can provide. Furthermore, according to Pickles, if the Stromberg-Carlson diverter develops a certain type of trouble, "you can't call out. Your whole system goes down until a repairman comes out. No one would be able to dial '9' to make an outside call until it was repaired, with a wait of maybe three or four hours." With the Phonetele equipment, however, if trouble should occur, a plug can be pulled and outside calls (with no restriction until repair is made) can be made immediately.

Apparently, Pacific Tel did not mention to the medical center that they offer Stromberg-Carlson toll diverters, even though it would have enabled the county (and taxpayers) to save \$15,000 per month. Of course, the use of such equipment would produce—and has produced—a substantial loss of revenue to the telephone company. Fortunately for the county, Pickles realized the savings that

could be achieved by eliminating telephone misuse by means of a carefully designed foreign-exchange trunking configuration and Phonetele solid-state multilevel restrictors.

Pickles was quick in pointing out that Pacific Tel was very cooperative in providing the interconnecting arrangements for the Phonetele equipment, and that the installers provided the best of service. From an anticompetitive standpoint, Pacific Tel must avoid interfering with a contractual matter, particularly in this case where the call misuse was obvious, and because they must install the connecting arrangements within 30 days of their being ordered, in accordance with a California Public Utilities Commission decision.

According to Pickles, the system also consists of "a lot of Western Electric interconnecting devices that don't have to be there. We have been fighting that for a long time." Charges include \$24 per trunk installation and \$1.80 per month per trunk.

Pickles claims that the telephone company's interfaces have caused problems at the medical center, such as a relay hanging up, thereby causing a trunk to become inoperative. This kind of problem apparently is not caused by the Phonetele equipment, since it does not generate network signaling, but is totally passive with respect to the network. Pickles believes the Phonemaster should be connected directly to the telephone network, as Phonetele claims can be done without harm to the network.

Phonetele has cited numerous customer installations where Pacific Telephone's ZZAGM interconnecting arrangements have interfered with the performance of the Phonemaster. Phonetele has filed a letter of complaint before the California Public Utilities Commission asking it to enforce its previous orders. Existing PUC orders foreclose Pacific Tel's connecting arrangement from interfering with the operation of the Phonemaster and compel Pacific Tel to allow direct connection of the Phonemaster until such time as any connecting arrangement failures can be resolved.

The inability of the ZZAGM to deal with incoming ring and step-by-step central-office problems apparently causes the Phonemaster to misread the telephone number being dialed, thereby allowing calls which should be restricted.

The medical center could have installed the Phonemaster much earlier had it not been for the inability of the telephone company to provide the quantity of foreign-exchange trunks required. "They just didn't have the facilities," says Pickles.

Pickles thinks that Pacific Tel should be happy about the Phonemaster installation, because the equipment provides network benefit rather than network harm to the telephone company's traffic. "I can show where I am taking thousands and thousands of calls per month out of the old CCapital office, which was one of their biggest headaches traffic-wise, and, using dedicated circuits, pumping them out to other exchange areas. It cannot hurt the CCapital area—it has to be a benefit." Nevertheless, the county has to pay extra for the foreign-exchange trunks, which appear to be of help to Pacific Tel's volume of traffic.

Because the medical center is saving \$13,000 per month on multimessage units by a more efficient system, theoretically the telephone company should also be saving this amount, if their charges are based solely on their costs. This amount is total waste that was incurred by the county in call misuse. By going to more effective trunking, the county and, theoretically, Pacific Tel are saving that amount of money. So, in theory, Pacific Tel is not at a disadvantage because of the medical center's restriction equipment. Naturally, the equipment does hurt Pacific Tel in lost revenues because of the elimination of unauthorized long-distance calls. Perhaps not too much is lost, though, because of the telephone company's fixed rate of return.

Equipment Will Be Removed

N-5

Next May 31, the medical center is going Centrex, and the Phonetele equipment will be removed. At that time, Pickles will no longer be able to survey what his trunks are doing, as he can now with the Phonetele equipment. The trunks will all be downtown in the telephone company's central office. He will be unable to tell if all trunks are in service, or if Pacific Tel buses-out two or three trunks for several days in a row, and doesn't repair them until convenient. "We will lose control," says Pickles.

After Centrex is installed, the medical center is going to use the same foreign-exchange trunking it now has in the telephone equipment room, wherein the telephone company has promised to provide the same restriction now provided by the Phonetele equipment. Local trunks will be restricted to the 213 area code. A new routing item under contract, not yet tariffed, and just recently put into operation in the county's Civic Center, will be put into the medical center with the Centrex operation. The equipment utilized by the telephone company will sense the first three digits and automatically route the call over the appropriate local or foreign-exchange trunk. A user will no longer have to dial a prefix code to choose the level, and then dial. The user will merely dial "9," and then dial the number, and the equipment will sense the prefix and put the call on the appropriate level, according to the telephone company.

At first it may appear somewhat strange to purchase and install \$50,000 worth of equipment to be used for only about eight months. But if the equipment pays for itself in less than two months, and saves the user \$30,000 per month thereafter, why not? Besides, the county plans to have Phonetele reinstall the equipment at some of its other 12 facilities, where it again will save a considerable amount in telephone charges.

This large installation of Phonemaster equipment is a dramatic example of what interconnection can do for a large-scale telephone user. It is a dramatic application with regard to the high level of trunks. It is a dramatic savings, spearheaded by a devoted and knowledgeable public servant—Jim Pickles. And it is a dramatic situation, involving the taxpayers' subscriber.

Any large facility with a high volume of telephone traffic should seriously consider some degree of foreign-exchange service with a restrictive device such as the Phonemaster 1040, to limit all self-dialed calls to a specific one-message-unit area. The savings are significant.

Tsk ... Tsk ... Tsk ... Ma Bell!

By Robert L. Feiner

President
Phonetele, Incorporated

O-1

"We hear you" say AT&T ads. And what AT&T hears is a revolution of subscribers liberated from the yoke of its autocracy, a tyranny that has been heretofore unwilling to respond to their needs.

Interconnection has changed AT&T's attitude, and now having alienated so many subscribers AT&T, like a toothless lion, bellows in empty halls—"We hear you." But who and how many hear the Bell's ring when so many are beyond earshot?

To leave the fold of Ma Bell becomes heresy, a form of un-Americanism, a bewildering incredulous experience for her. No dictator, however benevolent, can ever understand his subjects' desire for freedom, in this case freedom of choice. No amount of fear mongering by AT&T will forestall the exodus, because interconnection is freedom, and despotism is dead.

In unison across the land the feudal lords leading the Bell companies echo the litany of their demagogic Lord of Lords—"the network will be harmed" and "service will deteriorate" and "residential telephone bills will rise" and "competition is bad." And so the "Big Lie" propaganda goes on. USITA is but an echo, and NARUC, who is charged to serve as a bastion between the monopoly and the consumer, crumbles like a sand castle before a tidal wave. Who serves whom? What is the truth?

"Support your allegations of harm and network deterioration" says the FCC to AT&T, and they have not, because they cannot. Said the United States Department of Justice in the North Carolina case:

"There is no reason for believing that allowing the interconnection of customer-supplied equipment would have an adverse impact on residential rates."

Said the California Public Utilities Commission in its recent Order Instituting Investigation on certification:

"It may be argued that to allow direct interconnection of customer-provided equipment in lieu of that equipment traditionally furnished by the

telephone utility will disturb the revenues of the regulated utilities creating the potential for a restructuring of all rates and charges. If and when such a result should occur there are sufficient procedural remedies available to insure that rates for services by the utilities are properly and reasonably maintained."

The "truth did out" for but a brief moment, because the repentant CPUC, no doubt admonished by NARUC for having espoused heresy, was reluctant to stand on the truth, and so endeavored to expunge it by a subsequent order.

And how does the subscriber feel about interconnection? In the January 1974 issue of Communications News, Managing Editor Ken Bourne wrote about a dramatic case of interconnection. The subscriber involved is the average tax-paying citizen in Los Angeles County—the facility, their tax supported USC Medical Center. The article described how the Phonemaster restriction system facilitated more efficient trunking by imposing dialing controls, and is saving the County almost one half of its \$70,000 monthly usage bill against an equipment cost of \$50,000. Pacific Telephone had nothing comparable to offer and so the County went interconnect with Phonetele, Incorporated on this portion of their system.

Taking the annual savings at the Center of an approximate amount exceeding \$360,000 and capitalizing it at a nine-percent rate of return, Pacific Telephone has been "ripping the County off" at this one facility to the tune of \$4,000,000. Thanks to interconnection, the County just received a \$4,000,000 "credit." As to Pacific Telephone, one feels more pithos than anger.

The fact that Pacific and the Bell System does not provide a restriction system truly comparable to the Phonemaster is gross negligence. It has long been Phonetele's contention that the carriers have accrued substantial subscriber liability in having, by intent, failed their nonopoly responsibility to provide effective equipment when such technology has been available for many

O-2

years, and that the carriers could, in a class action lawsuit, be justly caused to rebate all misuse to subscribers for those many years. Pacific, et al, never provided restriction equipment for key systems.

There is nothing to mitigate their position, because providing restriction equipment of any type has been contrary to their marketing policy unless it was on a demand basis. Reducing telephone misuse, while benefiting the subscriber, hardly inures to the benefit of the telephone company, it would appear. In other words, the subscriber be damned! Such a policy by a monopolist is bankrupt; it is immoral, and it is criminal. The example of the County installation is a most willful act bordering on felonious grand theft. This is no ordinary subscriber. This subscriber is the people, some 6,967,000 Los Angeles County citizens.

But even overshadowing the immoral or "criminal" aspects of this situation is the shortsightedness and rank stupidity that arises from the leviathan "state" that is the Bell System. Surely the \$13,000 monthly message unit misuse at the County is based upon cost-related charges. Is not that sum the total of cost and rate of return, and therefore does not the restructured County system also effect savings back to Pacific? In other words, the County saved \$13,000 and Pacific lost its rate of return incorporated in that amount, and itself saved the difference, or should have.

Tolerating the long-distance misuse was aiding and abetting grand theft by a multitude of unauthorized users. The telephone company effectively conspired with unauthorized callers to "steal" thousands of dollars from the taxpayers. Pacific opened the County's coffers to wrongdoers and profited by it. They could have closed the lid and locked it, but they did not, thus sharing ill-gotten gains. What piracy!

Is revenue so dear and rate of return so sacred that Pacific could willfully and knowingly tolerate such a situation? Apparently so because the County situation was only rectified with the advent of interconnection. Perhaps this situation is what John deButts meant when in his recent address before NARUC he called for a "moratorium on further experiments in economics." And perhaps this is why AT&T has default foreclosed Phonetele from doing business outside California to the date of this writing by failing to provide

connecting arrangements, notwithstanding the fact that direct engineering liaison was initiated by Phonetele over three years ago—an unconscionably long time, and an act most suspect of willful and calculated omission. The Bell companies violate with impunity the tariffs they have promulgated by not providing the connecting arrangements they purport those tariffs demand, and do so with imperious indifference. Probably the only reason Phonetele has been able to do business in California is because of one long, three-year, bare-knuckle, eye-gouging, screaming-and-kicking, rumble-tumble, spitting-and-cussing battle that has been carried by Phonetele through the Public Utilities Commission all the way to the State Supreme Court, in quest of justice before the law.

And perhaps this County situation is what Commissioner Edward Larkin of the New York Public Service Commission would call "wicked" as he labeled interconnection generally; "morally wrong and likely to cause harm or trouble" he defined it. But this is *not* what Ben T. Wiggins, the President of NARUC, meant when he said "We must, at all costs, protect consumers against exploitation." He was speaking *against* interconnection at the USITA Convention, not for it. Interconnection is not "skimming the cream off the top" as he says, it is revealing the scum of wrongdoing.

This is not to say that Pacific deliberately went into the Center and, by plan, created the situation. One could not attribute to them either such malice or grant them such intelligence. Rather, it is due to the composite failure of a "system," a corporate malaise with little hope for redemption.

To dislike Bell System people, that is seldom possible; but the "system" itself that is another matter. A "system" cannot be tried for collective immoral, illegal, or stupid acts, especially when they are perpetrated under the aegis of "regulation," and condoned by an impassive, submissive, subscribing body, gripped by a very real fear, prostrated before the awesome urgence that is Ma Bell. Ma is not to be antagonized because, controlling the pulgar of telecommunications, she holds captive the entire fortunes of a business enterprise. The corporate consultants are properly contrite, partly because management does not support them. They tolerate all sorts of abuses when they should demand of Ma Bell her proper role of ser-

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vitude, as a monopoly regulated by the people to serve the people.

To pay Ma one dollar in misuse when equipment is available to prevent it is unconscionable cowardice. Rebellion is the order of the day. After all, whose money is at stake? The burden is on Ma Bell to provide the means for stopping misuse or pay its cost. But, there will be no rebellion, the subscriber is a coward, and Ma will collect her tribute, ad infinitum.

In her own interest she should provide restriction systems to facilitate a more efficient use of her network. Misuse creates inefficiency that is a waste of an important national resource—the enormous central-office capital equipment investment.

The number of similar subscriber cases involving sizable misuse are legion. Even the County is held captive in numerous other locations because it is burdened with Pacific's equipment, secured in place by basic termination charges. The County taxpayers are economically foreclosed from alternatives by an unfair competitive practice that retains an unreasonable hold on the market place for as long as five years. In the IBM-Telex case, such leasing tactics were held to be unlawful as an unfair competitive practice. The County cannot make a free choice with the availability of a new offering without paying prohibitive penalties. In other words, the taxpayers must go on paying more and getting less because a monopolist won't release them from an economic stranglehold. "We hear you" they say! What is it that AT&T hears?

It is such real or imagined abuses that contribute to ours being a capitalistic economic system, a system which embraces a policy of free competition as the most effective means of providing the best goods and services, to the largest body of people, at the lowest possible prices. Monopoly is commoned only where essential and only then under regulation. However, it is a fantasy to suggest that AT&T and her affiliates are in any way subjected to the degree of regulation that their size and power demand. The situation at the County is a dramatic example of that. The budgets of regulating bodies are too frequently too small to ever effectively do their jobs.

Regulated monopoly is essential as far as the very basic telephone network is concerned but there remains absolutely no evidence that it is essential where telephone equipment on a subscriber's premises is concerned. Government should only govern where essen-

tial and it should not perpetuate itself by perpetuating a monopoly over the interconnect market place. Government should not substitute itself for the dynamism of free competition; rather it should exert itself to cause AT&T to divorce itself methodically from the interconnect portion of the market place. Such an action would be wholly in keeping with the spirit, if not the letter of present-day antitrust laws.

Interconnection will merely deny the telephone companies rates of return on situations where the subscriber can do better by going interconnect. The telephone companies will be compelled to compete and become cost-efficient like any other business enterprise. The day may come when we will no longer hear that 20 percent of the people do 80 percent of the work. Interconnection will force the telephone companies to "squeeze the fat" out of cost. What efficiency can there be in granting a regulated rate of return on unregulated costs?

The idea advanced by Ben T. Wiggins that price performance has been "achieved without government subsidies" is unobscure. Government regulators have been granting endless subsidies in the form of adding a regulated rate of return to unregulated and unregulated costs, and then "taxing" the subscriber in the form of higher tariffs. That is not "performance"; it is perfidy. Who would ever believe that the conservative managers of the telephone companies and their conservative regulators would be practicing such thinly veiled socialism? They are at the public trough for subsidies and they should never forget it.

A company such as AT&T cannot carry the mantle of size and monopoly power without being subjected to a great deal of criticism, some of it just and some of it unjust. It is a gigantic bureaucracy. Like government, it can become an uncontrollable system of men who can do little to effect change. There are those arrogant management who would bring change. They must be called enlightened; they are refreshing, too few, and tread a perilous path in their careers.

We have a great telephone system in this country and the finest telephone system in the world. The credit belongs to AT&T and it is richly deserved. However, the best does not mean that it cannot be better, and it will be better because the greatest beneficiaries of competition will, in the final analysis, be the telephone companies themselves.



INC.

CERTIFIED MAIL

November 9, 1973

Mr. William R. Johnson, Secretary
Public Utilities Commission
State of California
340 McAllister Street
San Francisco, California 94102

Dear Mr. Johnson:

With no small amount of indignation, I wish to register my complaint to the Commission about the enclosed Pacific Telephone ad appearing in the November issue of Fortune magazine.

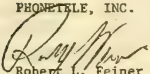
Pacific characterizes its competition as a bunch of barroom whores lead by a circus pitchman, clearly implying that the interconnect industry engages in dishonest and unethical business practices. The shallow text merely emphasizes that the sole purpose of the ad is one of character assassination. Instead of competing on meritorious arguments, which apparently they believe to be too few, Pacific resorts to desperate advertising practices. My disgust with Pacific is only exceeded by my disgust with Fortune for accepting such an ad.

In our years of competing with Pacific, I believe we have done so on the highest moral plane, and will continue to do so. I would not associate my Company with an ad of this type even if Fortune ran it at no charge.

I respectfully request that the Commission immediately take appropriate action against Pacific to cause them to cease and desist this reprehensible type of marketing practice. Inasmuch as Pacific is regulated by the Commission, the Commission's dignity mandates it.

Sincerely,

PHONE TELE, INC.


Robert L. Feiner
President

**Before you get razzle-dazzled into
buying a new phone system,
make one last call on your old one.**

P-3

Call us.

Call a Communications Consultant at your Pacific Telephone Business Office and check out the advantages of using our service on a monthly charge basis rather than buying a system.

First of all, you won't be tying up capital that you could be putting to better use in your business.

Secondly, you won't need to pay property taxes on the equipment, or worry about insurance.

And finally, you can be sure your service is never obsolete, because Pacific Telephone can keep it updated with the latest improvements. We

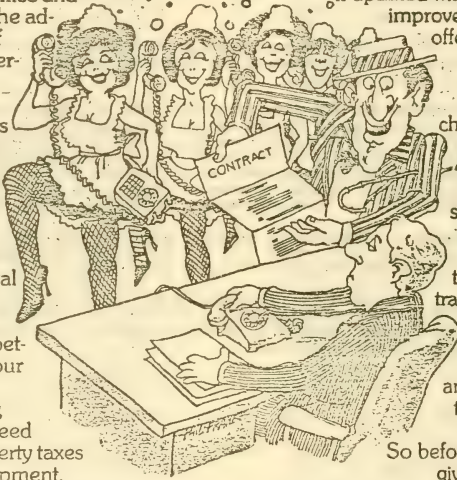
offer you over 1000 products and services to choose from.

There are 4000 other good reasons for going with us

... the thoroughly trained repair workers in our 130 maintenance centers throughout California.

So before you buy, give us a call.

It won't cost you a cent.



Pacific Telephone

Part of our business is helping business.

AFFADAVIT OF ALEX TAYLOR

V-1

I, Alex Taylor, Supervisor of Installation and Service for Phonetele, Inc., 15414 Cabrito Road, Van Nuys, California, declare as follows:

The customers listed below are those within the Pacific and General Telephone areas where the Phonemaster has been or is directly connected, i.e., where no protective coupler is installed.

TABLE I

<u>Pacific Telephone</u>	<u>Trunks</u> <u>Local - FEX</u>		<u>Date the</u> <u>Phonemaster</u> <u>Was Installed</u>	<u>Date the</u> <u>Coupler</u> <u>Was</u> <u>Installed</u>	<u>Period of Time</u> <u>Direct Connected</u> <u>Months - Days</u>	
Swett & Crawford	18	0	3/18/71	After 4/04/72 (See Note 1)	12	16
Wally Heider	6	0	5/05/71	After 4/04/72 (See Note 1)	10	29
SUB TOTALS	24	0			22	45
<u>General Telephone</u>						
Pennsylvania Life	15	10	9/27/71	6/27/73	23	0
Dick Joyce Volkswagen	7	1	2/22/72	None Installed	23	10
System Development Corporation	26	20 (See Note 4)	9/29/72	None Installed	16	3
Claude Short Dodge	5	3	11/15/72	5/09/73 (See Note 2)	14	17
Price Pfister	6	6	12/22/72	None Installed	13	10
Santa Monica Hospital	23	8	6/28/73	(See Note 3)	7	4
Sierracin Corp.	9	3	6/27/73	11/16/73	4	19
St. John's Hospital	23	9	7/31/73	None Installed	6	1
SUB TOTALS	114	60			106	64
GRAND TOTALS	138	60 or			128	109 or
		198			131	19

AFFADAVIT OF ALEX TAYLOR
(continued)

V-2

- Note 1: Decision No. 79878 before the Public Utilities Commission of the State of California, effective April 4, 1972, allowed Pacific Telephone to install its ZZAGM coupler.
- Note 2: Couplers remained installed on 3 FEX trunks, but disconnected on 5 local trunks as of 5/18/73.
- Note 3: Couplers were installed on 8 FEX trunks, but not on 23 local trunks as of 10/12/73.
- Note 4: There are also 4 Band 6 WATS and 2 California WATS lines connected to the Phonemaster.

I have been employed at Phonetele since October 30, 1972. At no time have I heard any complaints from telephone company personnel that the Phonemaster has ever created difficulties with telephone company equipment or network with respect to the aforementioned installations.

The customers listed in TABLE II are those within the General Telephone areas where the Phonemaster is not directly connected, i.e., where a protective coupler is installed in conjunction with General Telephone Company provided equipment.

AFFADAVIT OF ALEX TAYLOR
(continued)

V-3

TABLE II

	<u>Trunks</u>		<u>Date the Phonemaster Was Installed</u>	<u>Period of Time Connected With Coupler</u>	
	<u>Local - FEX</u>			<u>Months - Days</u>	
Credit Bureau Central	8 (See Note 1)	12	1/02/73	13	0
Pacific Hospital of Long Beach	1	5	11/08/72	14	24
Avery Label Company	10	0	2/21/73	11	13
Avery Label Company	6	0	2/27/73	11	7
Pacific Scientific	6	4	2/07/73	11	25
Engs Motor Truck	8	7	3/23/73	10	9
Byron Jackson	5	3	6/07/73	7	25
Claremont Colleges	0	6	4/19/73	9	13
Brentwood Savings & Loan	10	8	10/18/73	3	14
City of Long Beach	16	7	11/16/73	2	16
Volkswagen of America	11 (See Note 2)	15	11/29/73	2	3
Paramount Chevrolet	8	8	11/20/73	2	12
Quotron Systems, Inc.	16	9	11/30/73	2	2
Daylin, Inc.	10	10	12/18/73	1	14
Whittaker Corporation	12	8	12/21/73	1	11
TOTALS	127	102 or		99	184 or
	229			105	4

Note 1: There are also 4 California WATS lines connected to the Phonemaster.

Note 2: There are also 2 Band 1 and 3 California WATS lines connected to the Phonemaster.

Under penalty of perjury, I declare all the foregoing to be true and correct.

Dated at Los Angeles, California, this 1st day of February 1974.

Alex Taylor

PHONETELE

PHONEMASTER USERS

W-1

AUTOMOBILE DEALERS /DISTRIBUTORS

Beverly Lincoln Mercury
Claude Short Dodge
Crossroads Chevrolet
Engs Motor Truck Company
Hilcrest Motor Company
Dick Joyce Volkswagen
Klein-Foreman Motors
Maywood Bell Ford
Nelson Pontiac
Paramount Chevrolet
Pollard-Wittman-Robb Chevrolet
Jim Snow Ford
Stinner Pontiac & International Trucks
Town and Country Ford
Toyota Motor Sales USA, Inc.
Toyota of San Francisco
Volkswagen of America, Inc.
Bob Warren Pontiac

ENTERTAINMENT/PUBLISHING

The Burbank Studios
(Warner Brothers Columbia Pictures
Capitol Records
Family Record Plan
Wally Heider Recording (2)
J. E. Publishers Representative Company
KCET TV
KFI Radio Broadcasting
KFRC Radio
The New York Times Co.
Parliament News, Inc.
Pasadena Star News
Petersen Publishing Company
Record Plant (2)
Studio Instrument Rentals
Twentieth-Century Fox Film Corporation
William Morris Agency

HOSPITALS

Altany Hospital
Alta Bates Hospital
American Medicorp, Inc.
Alexian Brothers Hospital
Beverly Glen Hospital
Broadway Community Hospital
Burbank Community Hospital
Century City Hospital
Dominguez Valley Hospital
Daniel Freeman Hospital
Fox Hills Hospital
Garfield Hospital
Hawthorne Community Hospital
Hollywood Community Hospital
Imperial Hospital
Kaiser Permanente Hospital
La Palma Intercommunity Hospital
Lakewood Hospital
Los Angeles County USC Medical Center
Monterey Park Intercommunity Hospital
Morningside Hospital
Oakland Hospital
Orthopaedic Hospital
Pacific Hospital of Long Beach
Santa Monica Hospital
St. John's Hospital
St. Joseph's Hospital
St. Luke's Hospital (Pasadena)
St. Luke's Hospital (San Francisco)
Sherman Oaks Community Hospital
Tarauna Medical Plaza
Valley Doctors' Hospital
Valley Presbyterian Hospital
Van Nuys Community Hospital
Verdugo Hills Hospital
West Adams Community Hospital
West Anaheim Community Hospital
West Hills Hospital
West Valley Community Hospital
Whittier Hospital

HOTELS/MOTELS

Americana Motor Inn
Cable Motel
California 6 Motel
Canoga Park Motor Inn
Capri Motel
Del Capri Hotel
The Dunes Motel
Edgewater Lodge
Executive Motor Inn (2)
Gala Motor Lodge
Golden Pavilion Motor Inn
Holiday Inn
Islander Lodge (3)
Marriott Inn
Merrmaid Inn
Mikado Motel
Motel Orleans
Olympian Hotel
Pen & Quill
Pepper Tree Inn
Plaza International Inns of Hollywood
Quality Court
Quality Motel
Rodeway Inns of America
Royal Inn
San Francisco Downtown Travelodge
Sunset Travelodge
Vagabond Motel (B)
Westerner Motel

MANUFACTURING

Adolph's Food Products Manufacturing
Amphenol SAMS Division
(Division of Bunker Ramo)
Atlantic Richfield Company
Audio Magnetics (2)
Avery Label Company (2)
Avery Products Corporation
Baker Oil Tools
Bell & Howell
Bertea Corporation
Byron Jackson, Inc.
CentraLab Semiconductor
Dew Foam Company, Inc.
Griffith (Division of I T T)
Hoffman Electronics Corp.
Hughes Aircraft Co. (3)
International Rectifier
Liberty Electronics
Lightolier
Lloyd's Electronics, Inc.
Mattel, Inc.
Menasco Manufacturing Company (2)
Mellonics (Division of Litton Industries)
Merle Norman Cosmetics
Motorola Communications Corporation
Optigan Corporation
Pacific Scientific Company
Pepsi Cola Bottling Company
Phonemate, Inc.
Price Pfister
Pures Corporation, Ltd.
Quotron Systems, Inc.
Shapell Industries
Sierracin, Inc.
R & G Sloane Manufacturing (2)
Smith Tool
Teletyne Semiconductor
Union Oil Co. of California
Western Gear Corporation
Whittaker Corp.
Zellerbach Paper Company

BANKING/INSURANCE/SECURITIES

Bank of America
Brentwood Savings & Loan
Colonial Western Agency, Inc.
Lomas & Nettleton
Pennsylvania Life Insurance Company
Security Pacific National Bank
Stern, Frank, Meyer & Fox
Swift & Crawford
Title Insurance & Trust Company

GOVERNMENT

Alameda County (4)
Arcadia Unified School District
City of Long Beach, California
Los Angeles City Junior College District (3)
Los Angeles County, Dept. of Public Services
Los Angeles County, USC Medical Center
Los Angeles Unified School District

RESEARCH LABORATORIES

Bio Science Laboratories
Biophysical Procedures
G & H Technology, Inc.
Hughes Research Laboratories
Lawrence Radiation Laboratory (2)
Rand Corporation
System Development Corporation
Stanford Research Institute

EDUCATION

Arcadia Unified School District
California Institute of Technology
Claremont College
Los Angeles City College
Los Angeles Harbor College
Los Angeles Valley College
Los Angeles Unified School District

GENERAL BUSINESS

Alpha Beta/Acme Markets
A. J. Bayer Co.
Beechcraft West
Botsford Ketchum, Inc.
Bullock's (3)
Burrell & Company
CRM, Division of Boise Cascade
J. N. Czean Co.
Collins Food International
Computac Corp.
Daylin, Inc.
Earle M. Jorgensen
Erwin Wasey, Inc.
Golden West Skyways
Lago-Calc, Inc.
Lincoln Telephone and Telegraph Co.
Littlin Business Telephone Systems
Lucky Stores, Inc.
McKenna, Fitting and Finch
National Kinney of California, Inc.
National Cash Register
National Service Systems
Pacific Union Conference Office
Sunkist Growers, Inc.
Superior Industries
Telecredit, Inc.
Transamerica Information Services
Treasure Chest Advertising
Von's Grocery Company
Warner Food
Work Wear Corporation



INC.

17 January 1973

X-1

Mr. D. H. Erickson
 AMERICAN TELEPHONE & TELEGRAPH COMPANY
 195 Broadway
 New York City, New York 10007

Dear Mr. Erickson:

In my telephone conversation with you and Mr. Caldwell I expressed Phonetele's position on the CTD interconnecting arrangement proposed by AT & T. As I stated, it was our understanding that the only connecting arrangement in existence for our equipment is the ZZAGM. Now we are informed that the ZZAGM is not the Bell System arrangement but the Pacific arrangement.

For over three years we have been in contact with you directly on the subject of connecting arrangements. Pacific Telephone has always directed us to you on the subject of connecting arrangements. On December 9, 1970 there was a meeting at our office between your Mr. Brunson and Mr. Donald Black of Pacific Telephone. Mr. Black stated in his testimony in San Francisco on October 27, 1971 (Volume 5, Page 426):

"The purpose of this meeting was to discuss the feasibility of developing a voice connecting arrangement that would be compatible with Phonetele's equipment."

Mr. Black's testimony continued:

"It was decided that such an arrangement was feasible. Phonetele gave us two copies of a Phonetele drawing labeled 'Interface Functional.' Mr. Brunson took one copy to be used in developing a compatible arrangement. I retained the other copy for reference." (emphasis added)

It is clear from that statement that the development was to be undertaken by AT & T. That has always been our understanding from the date of that meeting, at the moment of Mr. Black's testimony, and subsequently. We never conceived of Pacific and AT & T developing separate arrangements which would require separate Phonemaster designs.

I wish to register vigorous protest on several points:

1. That the ZZAGM is not the Bell System arrangement as represented to us.
2. That we were never kept informed about the parallel development of the CTD. Your preliminary technical reference is dated September

1972. We did not receive a copy in a normal distribution manner. We heard about this arrangement from contacts in Pacific Telephone and wrote for a copy which we received in October.

3. That the CTD requires a different Phonemaster design than the ZZAGM. If we were directly connected we would not have such a problem. X-2
4. That the CTD requires certain costly "frills" in the manner of its presentation to the customer. This is unacceptable to us.
5. That the CTD goes beyond the mere theoretical concept of protecting the network, in that like a "cacoan" it wraps entirely around our equipment, reaching over to the customer side by foreclosing our ability to give the customer our own restrict tone. This is unacceptable to us.
6. That the CTD will not work with Key systems. In other words, over two years have passed since that first meeting and AT & T still forecloses our ability to connect to key systems, not withstanding Mr. Black's further testimony under questioning on Page 458:

QUESTION: "Mr. Black, early in your testimony you stated that the Bell Telephone Laboratories had developed an arrangement compatible to the Phonetele equipment (emphasis added).

ANSWER : Yes, I did."

If the CTD arrangement does not work with key systems it can hardly be compatible.

7. That by your own admission you are not developing an arrangement to work with key systems, i.e., that there is nothing in process.

Though Mr. Black is technically employed by Pacific Telephone and not by AT & T, he certainly became the agent of AT & T and your office. The fact that Pacific is owned by AT & T (90%) hardly suggests there is a difference.

It is our feeling that we have been dealt with in bad faith. We respectfully request and demand the following:

1. That immediate reconsideration be given by AT & T on a "crash" basis of its CTD design parameters as raised by our John Van Doorne over the telephone with you.
2. That AT & T develop on a "crash" basis an arrangement which will work with PAEX or key systems, as does the ZZAGM. The Phonemaster will work in either case with direct connection.
3. That AT & T state to us in writing that it will allow us direct connection in key systems, if necessary, anywhere in the Bell System, pending the development of a suitable arrangement.

4. That AT & T inform us immediately of any proposed tariff filings on the CTD before the F.C.C., and arrange that all of the Bell affiliates likewise inform us of any tariff filings before their respective state agencies.
5. That AT & T recognize that Phonetel stands completely opposed to any connecting arrangement other than a simple terminal block. It is our contention that there is no basis for AT & T to require the CTD arrangement and that AT & T should allow the Phonemaster to be directly connected forthwith. We presume that this issue will be determined for AT & T through Phonetel's pending writ before the California State Supreme Court, and/or the California Public Utilities Commission in its action against Pacific Telephone.

X-3

We feel that this situation fortifies our arguments about the unfairly competitive aspects of connecting arrangements. As to the unavailability of an AT & T arrangement that works with key systems, the unfair competition arguments are transcended by your foreclosing a service to the subscriber where AT & T itself does not offer comparable service. The fact that AT & T wrongfully and imperiously demands protective arrangements on one hand, and then does not provide nor is planning to provide one after two years on the other hand, is evidence of its indifference in meeting its carrier responsibility to allow a needed subscriber service. In other words, the subscriber be 'damned'!

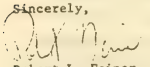
Neither Pacific (AT & T) or General were ever able to evidence actual harm in our case before the California Public Utilities Commission. The only issue was the phantom of "theoretical harm." In our view, the sole purpose of the ZZAGM and the CTD is to unfairly compete against our restrictor which reduces misuse, thereby economically benefitting the customer to the economic detriment of the carrier. Our Phonemaster can program a multi-level telephone system, either a PABX or key system, by allowing or disallowing specified three digits, six digits, and in some cases nine digits. AT & T has no comparable offering and provides nothing for key systems to our knowledge. (I have enclosed literature as a matter of courtesy).

My view to this CTD situation may indeed be hard, but there is no mitigating evidence to suggest that this is an error of ommission. Rather, it appears to be an error of ommission - a patently obvious act, unfairly competitive and thinly veiled. Perhaps it is merely a "conspiracy" of corporate confusion and ineptitude, but we opt for the former conclusion; we do not choose to underestimate the ability of the world's greatest monopoly to play "interconnection chess." You may publicly regard our desire to directly connect our equipment as akin to performing brain surgery with a meat axe, but we are all aware that it is more like skinning an elephant with a scalpel. We believe that it is wrong to deny the subscriber a most valued service and we believe it is wrong that he be "fleeced" for the unnecessary equipment that you demand. This is not a

society where one is guilty until proven innocent, and on behalf of the subscriber it is mandatory that you vindicate your requirement of the CTD for a passive device like the Phonemaster.

I would appreciate an early response to this letter.

Sincerely,


Robert L. Feiner
President

dvp
Enclosures

CC: ✓Mr. Bernard Strassburg
Chief, Common Carrier Bureau
FEDERAL COMMUNICATIONS COMMISSION
Washington, D. C. 20554

✓Mr. John P. Mathis, Esquire
PUBLIC UTILITIES COMMISSION
State Building, Room 5246
San Francisco, California

✓Examiner Catey
PUBLIC UTILITIES COMMISSION
State Office Building
San Francisco, California

✓Commissioner Symons
PUBLIC UTILITIES COMMISSION
State Office Building
San Francisco, California

✓Mr. W. Schiavoni
AMERICAN TELEPHONE & TELEGRAPH COMPANY
New York City, New York

✓Mr. Larry Hohman
AMERICAN TELEPHONE & TELEGRAPH COMPANY
New York City, New York

✓Mr. Jim Caldwell
AMERICAN TELEPHONE & TELEGRAPH COMPANY
New York City, New York

✓Mr. Milton Morris
PACIFIC TELEPHONE
140 New Montgomery Street
San Francisco, California

Mr. Donald Black
PACIFIC TELEPHONE
140 New Montgomery Street
San Francisco, California

✓Mr. Donald Duckett
GENERAL TELEPHONE COMPANY
2020 Santa Monica Boulevard
Santa Monica, California

✓SIGELMAN & STEIN
9595 Wilshire Boulevard
Suite 900
Beverly Hills, California

X-4

THE PACIFIC TELEPHONE AND TELEGRAPH COMPANY

140 NEW MONTGOMERY STREET • SAN FRANCISCO, CALIFORNIA 94105

AREA CODE 415 399-2392

F M WIDENER
REGULATORY REPRESENTATIVE

July 25, 1973

Mr. R. L. Feiner, President
Phonetele, Inc.
15414 Calvito Road
Van Nuys, California 91406

2-1

Dear Bob:

As agreed at the conclusion of our July 17 meeting, I am enclosing copies of the minutes of that meeting plus minutes of the May 24 and June 26 meetings.

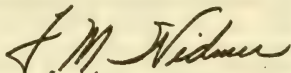
According to my notes you also wanted us to provide you with the following:

1. Sketches of our interconnection unit (KTX) for use with Key Telephone Systems.
2. Information on international dialing.

Both of these items are included.

Again, I want to thank you and John for participating in, and contributing to, the many concerns we both have in resolving the interconnect problem.

Very truly yours,



Attachments

Subject: Report on Meeting with Phonetele, Inc.
 Date: July 17, 1973
 Name: T. G. Cross
 D. H. Erickson

2-2

A meeting, the third of its kind, was held on July 17, 1973 at the Pacific Telephone Co. Headquarters, 140 New Montgomery Street, San Francisco, Calif. with representatives from Phonetele, Inc., PT&T, BTL and AT&T, to review proposed connecting arrangements, resolve remaining technical issues and establish tentative dates for availability. In attendance were:

R. Feiner - President, Phonetele, Inc.
 J. Van Doorne - Vice President Engineering, Phonetele Inc.

N. Phillips - PT&T Regulatory
 F. Widener - " "
 D. Black - " Engineering

G. Heminger - BTL, Denver

T. Cross - AT&T, Engineering
 W. Coe - " "

PT&T opened the meeting with a brief statement of the reasons for holding this meeting and what we hoped to accomplish.

AT&T then reviewed the past negotiations between Phonetele, Inc. and the Bell System with particular emphasis on the discussions and agreements reached in the San Francisco meeting of May 24, 1973 and the meeting in Denver on June 26, 1973. AT&T also reviewed the request by Phonetele to change the 6-wire interface to a 4-wire interface. As reported in the minutes of the Denver meeting, AT&T agreed to look into the requested changes and report on all open items and tentative schedules. In the interim, Phonetele was to determine whether a real need for a 4-wire interface could be substantiated. AT&T also reported that in preparation for this meeting, a conference call was placed to Phonetele on July 11, 1973 to discuss in advance the progress and find out if Phonetele's studies of 6-wire vs 4-wire still indicated that 4-wire was the preferred course of action to best meet Phonetele's requirements. Phonetele said that other pressures had precluded further study of their request for 4-wire and hence a decision had not been made. AT&T explained that this put us at an impasse and we would have to put a hold on development pending his decision. Phonetele said to make it 4-wire.

2-3

AT&T reported the Bell System activities since the last meeting (6/26/73) as follows:

- a. AT&T will provide two connecting arrangements that will meet all of Phonetele's stated technical requirements:
(i) 4-wire* interface; (ii) customer-provided distinctive restricting tone; and (iii) battery and ground on sensing leads in idle state.
- b. The connecting arrangements will provide a clean, non-interacting interface with the following advantages:
(i) provides the Bell System network with acceptable network protection while allowing customer-provided tone and Phonetele's preferred interface; (ii) represents a low risk solution to Phonetele, in view of stated objectives; and (iii) can, and will be used by other manufacturers of call restricting equipment.
- c. Close cooperation of all involved Bell System units will permit the following scheduled availability of material for shipment from the factory despite the delay necessitated by the design change from 6-wire to 4-wire.
 1. Interim arrangement for key telephone systems (KTX) - October, 1973.
 2. Final arrangement for PBX trunks with customer-provided tone (CTH) - December, 1973.

AT&T summed up by saying that they have dealt with Phonetele in good faith and have bent over backwards to be responsive to Phonetele's requirements and are now looking for resolution of this matter.

Phonetele said they were quite appreciative of the cooperative effort of the Bell System, of their willingness to consider Phonetele's inputs and did not doubt that maximum effort had been expended to come up with the connecting arrangements needed and that practically speaking, the

*This will be an optional 4-wire or 6-wire interface to accommodate other manufacturers of call restricting equipment.

2-4

proposed availability dates were quite responsive to Phonetele's needs. However, they felt that it has come two and a half years too late. They stated that the estimated rate of four to five dollars a month per trunk is much too high and can only be construed as a means for the Bell System to suppress competition.

AT&T asked if the proposed connecting arrangements met all of the technical requirements of Phonetele and, if so, which interface did they want, 4-wire or 6-wire.

Phonetele said that they would like to make it clear that even if all of their technical standards are met, they are not committing Phonetele to use of the new connecting arrangements at this time because of the anticipated rates. Phonetele stated, however, that the technical design was satisfactory, and the 4-wire interface is the one Phonetele will want if they accept the rate established.

At Phonetele's request, BTL presented a detailed explanation of the connecting arrangement for PBX trunks (CTH) including a simplified sketch on the easel showing interaction between the connecting arrangement and the customer-provided equipment.

Phonetele distributed a letter addressed to AT&T describing their proposed connecting arrangements and a preliminary sketch of the circuit layout. They described the circuit functions and functions that would be incorporated in the basic design of the call restrictor. Phonetele requested comments from the Bell System.

BTL, after studying the circuit, pointed out that it would not release the trunk, did not switch out the high impedance monitoring leads, and did not protect against network blockage. Minor design changes could correct two of these deficiencies (release of trunk and network blockage).

PT&T noted that hazardous voltage protection was not provided and AT&T noted that disconnect timing was provided by the call restrictor rather than by the connecting arrangement which would not be acceptable.

After much discussion, the Bell System representatives concluded that the proposed arrangement was much like Z2AG1 with the interface leads reconfigured and that if deficiencies noted were taken care of, the cost of the arrangement would closely approximate the cost of the proposed Bell System arrangement.

In closing, the following points were made:

2-5

Phonetele:

- a. Even a compromise connecting arrangement that costs \$5.00/mo. is not acceptable and the FCC will be advised of the anticompetitive nature of the connecting arrangement.
- b. They feel that AT&T will force them to accept the compromise unit.
- c. If they had a fifty cent connecting arrangement, they would never have entered into litigation.

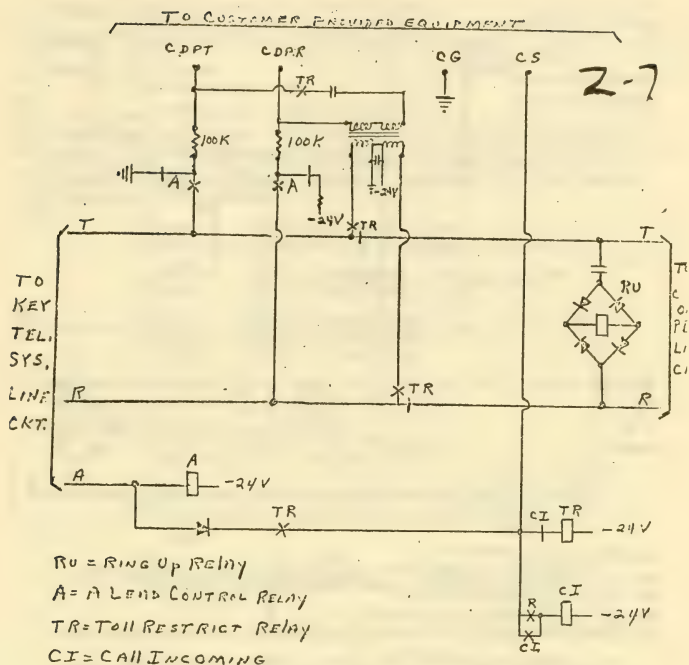
AT&T:

- a. AT&T has been dealing in good faith and never tried to jam anything down their throat.
- b. AT&T has done considerable homework in the past to resolve technical issues and apparently have done so to Phonetele's satisfaction.
- c. Since Phonetele has no technical prohibition against our compromise design for the connecting arrangement, we will forge ahead with its development for use by Phonetele, if they so choose, and other manufacturers of call restricting equipment. The features of the connecting arrangements are given in Table 1. The functional diagrams as described in the meeting are being prepared and will be forwarded shortly.
- d. To eliminate misunderstandings, future technical questions should be forwarded in written form to the AT&T Co.

2-6

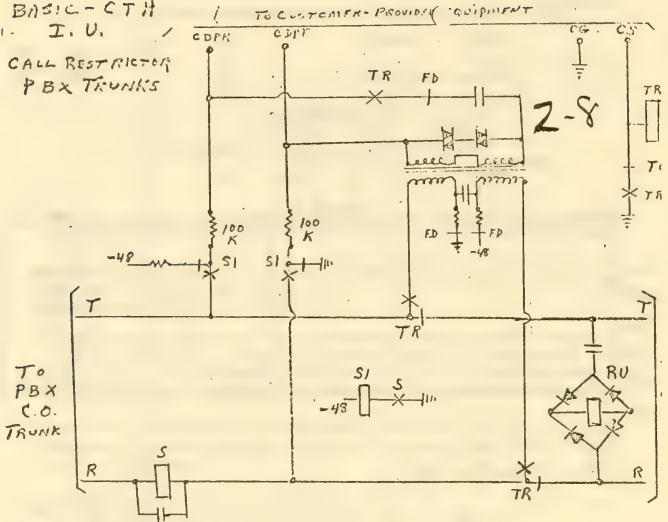
Table 1Features - Connecting Arrangement CTII

1. Provides a means of connecting customer-provided (CP) call restricting equipment to PBX trunks on a 4-wire or 6-wire interface basis.
2. Provides high impedance monitoring taps (100K ohms) to enable CP equipment to determine changes in line status such as, line seizure, address signalling and disconnect.
3. Recognizes a signal from the customer-provided equipment that call is to be restricted, sends a disconnect signal to the central office and closes a transmission path toward the calling station permitting the CP equipment to apply a distinctive call restricting tone.
4. Removes high impedance monitoring taps from the line in the idle state and provides battery and ground on the sensing leads toward the CP equipment.
5. Protects against hazardous voltage.
6. Protects against network blockage.
7. Protects against longitudinal imbalance.
8. Minimizes glare (simultaneous seizure of a two-way ground start trunk from both ends) and improper billing.



BASIC KTX I.U.
KEY TELEPHONE SYSTEM
CALL RESTRICTOR

BASIC - CTH
I. U.
CALL RESTRICTOR
PBX TRUNKS



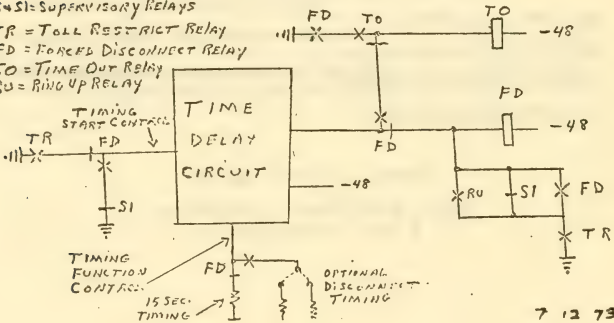
SI=SUPERVISORY RELAYS

TR = TOLL RESTRICT RELAY

FD = FORCED DISCONNECT RELAY

TO = TIME OUT RELAY

RU = RING UP RELAY



7 12 73

Subject: Report on Meeting with Phonetele, Inc.

Date: May 24, 1973

Name: T. G. Cross
D. H. Erickson

2-9

A meeting was held on May 24, 1973 at the Pacific Telephone Company Headquarters, 140 Montgomery Street, San Francisco, California with representatives from Phonetele, Inc., P.T. & T. and A.T. & T. to discuss a Bell System-wide connecting arrangement for call restricting equipment such as the Phonetele Phonemaster. In attendance were:

R. Feiner	- President, Phonetele, Inc.
J. Van Doorne	- Vice President Engineering - Phonetele, Inc.
F. Widener	- P.T. & T. Regulatory
D. Black	- P.T. & T. Engineering
T. Cross	- A.T. & T. Engineering
D. Erickson	- A.T. & T. Engineering
J. Caldwell	- A.T. & T. Engineering

During the discussion, it was agreed that there were three possible plans for call restricting equipment connecting arrangements:

Plan 1 - CTD for 2 way PBX trunks
Modified ZZAGM for 1 way PBX trunks.
New connecting arrangement for KTS

Plan 2 - New single connection arrangement for PBX & KTS with forced disconnect which doesn't require PBX trunk splitting option and which allows customer-provided direct tone.

Plan 3 - New single connection arrangement that protects network blockage and glare and allows for customer-provided equipment tone.

Also, certain technical agreements pertaining to all plans were reached:

1. High impedance tap (tip & ring 100K resistor) for detection of supervisory and address signals.
2. Switched high impedance taps. Items to be resolved were:
 - a. terminated in battery when on hook?
 - b. terminated in open when on hook?

3. Six wire interface except for CTD Plan 1 PBX 2-way trunk which is four wire.

2 wire supervisory and address signals
 2 wire restrict request contact
 2 wire CPE provided tone

2-10

In closing, it was agreed that the future action items were:

1. Provide PBX information to Phonetele showing functional description of off hook on hook sequence.
2. Each resolve technical concerns associated with item 2.
3. Expedite developmental availability of new KTS connecting arrangement having forced disconnect feature.
 - a. provide models for Phonetele's interface compatibility evaluation.

A future meeting was scheduled in Denver, June 26, 1973 to firm up the remaining technical items and discuss the technical merits of all three plans.

Subject: Report on Meeting with Phonetele, Inc.

Date: June 26, 1973

Name: T. G. Cross
D. H. Erickson

2-11

A meeting was held on June 26, 1973 at A.T.&T. Company, 1200 West 120 Avenue, Denver, Colorado with representatives from Phonetele, Inc., P.T.&T., B.T.L. and A.T.&T. to review proposed connecting arrangements, resolve remaining technical issues and establish tentative dates for availability. In attendance were:

R. Feiner	- President, Phonetele, Inc.
J. Van Doorne	- Vice President Engineering - Phonetele, Inc.
N. Phillips	- P.T.&T. Regulatory
F. Widener	- P.T.&T. Regulatory
R. Boss	- P.T.&T. Engineering
S. Stewart	- P.T.&T. Engineering
G. Heminger	- B.T.L. - Denver
J. Rosenberger	- B.T.L. - Holmdel
T. Cross	- A.T.&T. Engineering
D. Erickson	- A.T.&T. Engineering
W. Coe	- A.T.&T. Engineering

AT&T opened the meeting with a review of the agreements reached at the May 24, 1973 meeting in San Francisco. There was general agreement among those present that the presentation substantially represented what had been decided as the course of action to pursue.

AT&T explained the functional operation of a proposed design for a new voice connecting arrangement for use with customer-provided call restricting equipment associated with P.B.X. ground start trunks. The proposed arrangement would permit the customer, at his option, to supply a distinctive call restricting tone.

Phonetele questioned the proposed technique for terminating the address sensing leads in the idle condition. AT&T pointed out that all options would be available, i.e., Telephone Company-provided voltage termination, customer-provided voltage termination or open circuit.

BTL presented a detailed description of the proposed interconnecting arrangement based on the six-wire interface agreed upon at the May 24 meeting. Phonetele expressed a desire to have a four-wire

interface to facilitate their conversion to a hard wired configuration should they be successful in overturning in court the requirement for a connecting arrangement. AT&T pointed out that agreement had been reached on a six-wire interface and much time and effort had been expended to provide for such a design for two connecting arrangements (Key System and PBX trunk). AT&T also explained that redesigning to accommodate a 4-wire interface would further delay providing the connecting arrangements so "vitally" needed by Phonetele. Phonetele said they would be willing to wait the needed additional month or two it might take if the design change was really needed and was feasible. BTL agreed to investigate if the change could be accomplished without major redesign effort (one arrangement has been designed twice already). 2-12

Further discussion of the proper idle state termination for the address sensing leads led to agreement that termination voltage, when required, would be supplied by the Telephone Company with an option of no voltage (open lead) in the idle condition.

BTL next described an arrangement for call restriction for key telephone systems with option for customer-provided distinctive restricting tone. A detailed description was presented including block diagrams, and it was noted that an interim equipment arrangement design was complete and ready to be released for documentation and implementation. The design was for a six-wire interface to the customer-provided equipment identical to the one proposed for the PBX trunk type. BTL also compared functions of the two connecting arrangements emphasizing the difference in operation where appropriate.

AT&T summed up the agreements and discussions of the day:

- (a) Address sensing leads would either be open or have voltage supplied by the Telephone Company when in the idle state.
- (b) Development and trial would continue on the 6-wire connecting arrangement for use with PBX application of call restricting equipment.
- (c) Development and trial would continue on the 6-wire connecting arrangements for use with key telephone system applications of call restricting equipment.
- (d) Bell Laboratories would investigate the possibility of changing both designs to a 4-wire interface.
- (e) Phonetele would make a definitive analysis of the real need for a 4-wire interface. Bell Labs, AT&T and Phonetele should discuss progress as necessary.

AT&T next addressed the estimated schedules for finalization of design, documentation, manufacture and availability as follows:

PBX - about 1 year
Key Telephone System - interim design - Oct. 1973
Key Telephone System - final design - about 1 year

2-13

Phonetele said that the key telephone system arrangement would be satisfactory as it represents a very minor part of their business. Phonetele voiced strong disapproval of waiting a year to expand their marketing effort from California to the rest of the Bell System operating territory. They demanded that Pacific Telephone's Connecting Arrangement ZZAGM be made available as an interim arrangement throughout the Bell System.

AT&T agreed it would try to improve availability of the connecting arrangement for PBX trunks, but did not agree to provide ZZAGM systemwide. To this end, Bell Labs will attempt to provide an arrangement consisting of presently available key telephone units. The timing requirements may preclude this approach.

AT&T requested information from Phonetele as to which States they were planning to sell in and approximate number of connecting arrangements required.

A meeting was scheduled to be held in San Francisco at 9:00 A.M. on July 17, 1973. The meeting will be held at the Pacific Telephone Company Headquarters, 140 New Montgomery Street.

It is expected that the final design of the two connecting arrangements will be finalized at this meeting and no further meetings are contemplated.

DD-9

NETWORK HARM -- NO EMPIRICAL SUPPORT

- DIFFICULTY IN MONITORING AND PROVING HARMS
- TWO FCC REQUESTS FOR HARM DATA
 - INABILITY TO COMPLY
- NO PRACTICAL SURVEILLANCE PLAN PRESENTLY FEASIBLE
- "PASSIVE DEVICE" TARIFF CONCESSIONS UNDERMINE BELL POSTURE ON HARM

IN THE SUPREME COURT OF THE STATE OF CALIFORNIA

IN BANK

PHONETELE, INC.,)

Petitioner,)

v.)

PUBLIC UTILITIES COMMISSION,)

Respondent;)

GENERAL TELEPHONE COMPANY OF)
CALIFORNIA, et al.,)

Real Parties in Interest.)

SUPREME COURT

FILED

APR 8 1974

G. E. Bishel, Clerk

Deputy

S. F. 22979

GG-1

Petitioner, Phonetele, Inc., seeks review of decision No. 80247 of the Public Utilities Commission (Commission).

Phonetele manufactures a device known as the Phonemaster 1040, which restricts outgoing telephone calls to selected area codes or exchange prefixes. Decision No. 80247 determines that the Phonemaster may not be connected to a telephone without the installation of a protective connection provided exclusively by defendant utilities, General Telephone Company of California (General) and Pacific Telephone and Telegraph Company (Pacific). There is a charge of \$24 to install the connection and a \$1.80 a month service charge, thereby increasing the cost to a telephone subscriber who proposes to use the Phonemaster.^{1/} Phonetele asserts that the evidence was insufficient to demonstrate direct connection of the Phonemaster presents a hazard to the telephone system as a whole, that only a finding of potential harm to the system was made and such a finding is insufficient to justify the Commission's order, and that the Commission failed to make proper findings on the antitrust issues involved.

As indicated *infra*, we hold that the decision must be annulled because the Commission did not employ appropriate standards in determining that the protective connection device provided by the utilities is "necessary." That is, the Commission declared only that absent the connection device, "problems which can presumably be corrected . . . could arise from the design, manufacture, installation and maintenance of the Phonemaster." (Emphasis added.) This equivocal assertion cannot support its conclusion of necessity.

Prior to 1971, the Phonemaster had been installed on the premises of several of Phonetele's customers without the utility's connection device. In January 1971, General notified a Phonemaster user that its telephone would be disconnected unless use of the Phonemaster was discontinued. Phonetele sought relief before the Commission. After hearing, the Commission determined (in Decision No. 78891) that the Phonemaster was in no way detrimental to the telephone network, that the evidence was so clear on this matter that there was "no room for doubt," and that findings of fact to the contrary could not, in justice, be made. Therefore, it was concluded, the Phonemaster qualified for connection to the telephone system without the required addition of General's connecting device.

General petitioned for rehearing but before the Commission acted on the petition, Phonetele filed a complaint against Pacific based on an identical threat to discontinue telephone

^{1/} By subsequent decision, we are now advised, the utilities were ordered by the Commission to supply the protective interface to Phonetele customers without charge.

service to subscribers who used the Phonemaster device without a protective interconnection provided by Pacific. The Commission held hearings on the complaint against Pacific, granted General's petition for rehearing, and considered the complaints against the two utilities on the basis of a consolidated record. During the course of the proceedings, there was discussion regarding adoption of a certification program which would permit the connection of the Phonemaster to the telephone network without the utility-provided device. All the parties appeared to agree that it would be desirable to adopt a certification procedure for instruments like the Phonemaster.

Decision No. 80247 involved here declares that it is "possible" to design, manufacture, install and maintain a call diversion device like the Phonemaster for connection with the telephone system without a protective device provided by the utilities, but that the Phonemaster did not qualify for direct connection because of the following four factors:

1. Design. The design of the Phonemaster "could" cause cross-talk and excessive noise on the telephone network. However, this problem "might possibly not affect other customers." But lack of adequate time delay "could" cause misdirected telephone calls and improper billing.
2. Manufacture. Some models incorporated a power supply not listed by Underwriters Laboratories and not tested to insure against the passage of high voltage.
3. Installation. In two cases installation of the Phonemaster was defective.
4. Maintenance. Reasonable assurance of continuing proper operation was necessary.

All of these asserted deficiencies "can presumably be corrected," it is stated, but such correction "would seem to require" a certification program. Thus, "utility-provided protective connection devices are necessary and appropriate for the Phonemaster 1040 unless and until a suitable certification program is established and implemented."^{2/}

The two leading authorities on connecting customer owned and maintained equipment to the telephone system are *Re Use of Carterfone*, 13 F.C.C.2d 420, 430, and *Hush-a-Phone Corp. v. United States* (D.C.Cir. 1956) 238 F.2d 266. These cases establish that the use of customer-owned equipment may be proscribed only if it is shown that the instrument in question will have an adverse effect upon the telephone network as a whole. *Carterfone* makes it clear that a showing that a device might harm the system is insufficient to justify proscription and that a finding of actual adverse impact on the network or at least a probability of such impact is required. (13 F.C.C.2d 420 at p. 424; 13 F.C.C.2d 430 at p. 435, et seq.) The Commission itself has held that an attachment must constitute an unreasonable burden or have a substantial adverse effect upon the telephone network in order to justify having its use enjoined. (*Bowles v. P.T.&T. Co.* (1966) Decision No. 71608, 66 P.U.C. 150, 480-91; see also *Lauria v. P.T.&T. Co.* (1956) Decision No. 70450, 65 P.U.C. 510, 326.)

The foregoing cases involved absolute prohibitions against the use of an attachment whereas here the issue is not whether the Phonemaster may be attached to the telephone system but whether the connection may be accomplished without a connecting device provided by the utilities. Nevertheless, the determinative principle in both circumstances relates to the effect of a device upon the telephone network as a whole, and the principles to be applied are the same in both situations.

Decision No. 80247 findings fall short of complying with the standards enunciated in apposite cases. The decision points to various defects in the Phonemaster, only one of which is specified as relating to the telephone system as a whole. "Lack of adequate time delay," it is stated, "could" cause mis-directed telephone calls and improper billing. This finding obviously fails to support the Commission's conclusion that a utility-provided interface is "necessary" since the Commission made no determination that the Phonemaster, if installed

^{2/} Decision No. 80247 is designated as an "Interim Opinion" but it is clearly final insofar as it relates to the necessity for Phonetele to employ a protective connection provided by the utilities pending the implementation of a certification program.

GG-2

without the protective connection, would actually have any adverse effect upon the telephone system, let alone a substantial adverse effect, nor is there any indication that such a result is reasonably probable.

GG-3

The remaining purported defects enumerated in the opinion are not related to the telephone system as a whole, and some would not support a finding of a substantial adverse impact, even if such a finding had been made. For example, the Commission found that "some models" of the Phonemaster were not listed by Underwriters Laboratories and not tested to insure against the passage of high voltage. In its petition for rehearing before the Commission Phonetele asserted that it was willing to comply with the requirement of a power supply approved by Underwriters and that, in fact, oral approval had already been accorded by Underwriters. Obviously a defect which can be so easily remedied cannot be the basis of a conclusion that a protective connection is necessary in order to avoid substantial harm to the vast telephone system.

The Commission's conclusion that the correction of the defects "would seem to require" a certification program is a non sequitur. While a certification procedure, by specifying standards for customer-provided equipment, might assist the Commission, the utilities and the manufacturers of the instruments in evaluating the impact of a device on the telephone system as a whole, mere formulation of a program would not itself result in the correction of any of the deficiencies found by the Commission in the Phonemaster. The Commission's opinion concedes that it will be some time before a "possible" certification program has been devised, a prediction which has been corroborated by events: no certification program has been adopted in the nearly two years since decision No. 80247 was rendered.^{3/}

Phonetele makes numerous additional contentions. It argues that the evidence before the Commission does not justify a conclusion that the use of the Phonemaster without the utility connection will result in either actual or potential harm to the telephone system, and Phonetele urges this court to substitute its judgment for that of the Commission and order direct connection of the Phonemaster. There was testimony that the Phonemaster presented some potential for damage to the telephone system; therefore the Commission should be afforded the opportunity to determine whether the evidence justifies a finding of actual or probable adverse effect upon the telephone system as a whole and the degree of harm thereof pursuant to the requirements described herein.

Phonetele also challenges the validity of a portion of tariff 135-T, which provides that customer-provided voice transmitting or receiving equipment which involves direct electrical connection with the telephone system must be accomplished by means of a connecting arrangement furnished by the utilities. Phonetele contends that this tariff is void because it was adopted without hearing by the Commission and that the requirement for a connecting arrangement provided by the utilities without regard to the harmful character of the attachment violates *Carterfone*. These matters were not directly raised in Phonetele's complaints or in the petition for rehearing before the Commission, and they are not discussed in decision No. 80247. In any event, the Commission attempted, with the erroneous result discussed above, to consider the effect of the Phonemaster on the telephone system as a whole as a basis for requiring that the utility connection be utilized.

Another assertion by Phonetele is that the Commission failed to make findings as to the antitrust aspects of its decision, in violation of our holding in *Northern California Power Agency v. Public Util. Com.* (1971) 5 Cal.3d 370, 379. This defect was remedied in a supplemental opinion (No. 80891) in which the Commission rendered findings adverse to Phonetele on the antitrust issue.

Nevertheless the free enterprise aspects involved in this proceeding merit brief comment. The manufacture of instruments like the Phonemaster, designed to enhance the utility and reduce

^{3/} The Commission ordered Pacific and General to present feasibility studies for a certification program. On April 2, 1973, 10 months after decision No. 80247 was filed, Pacific advised the Commission that in its view a certification program at a reasonable cost was not practical and that, in any event, consideration of such a program by the Commission should be postponed pending the adoption of national certification standards which were in the process of formulation. At oral argument in this cause Pacific changed its position again and urged a state certification program as the most effective solution.

the cost of telephone service, is a relatively new and, as all parties concede, a rapidly growing industry. Some of these devices conflict with the economic interests of the utilities in two respects: first, they are in direct competition with instruments provided by the utilities to perform similar functions, and second, they result in a reduction of utility revenue because they restrict the number of telephone calls subscribers may make. In the present case, for example, both utilities sell call diverters and, according to Phonetele, 10 days after decision No. 80247 was filed Pacific proposed to place on the market a new device which was "truly competitive" to the Phonemaster.^{4/} Phonetele does not raise serious objections to the findings of the Commission on the antitrust aspects of its supplemental opinion, and we do not express any opinion as to the merits of the Commission's findings in this respect. Nevertheless, the circumstances pointed out by Phonetele illuminate the necessity for a careful weighing of competitive factors. Where, as here, a finding in favor of the utilities will result in a potential threat to free competition, the Commission must be particularly solicitous to assure that its ultimate determination is warranted by the need to safeguard the telephone network as a whole.^{5/}

We do not intend to suggest that the Commission is powerless to adopt standards to assure that customer-owned equipment will not adversely affect the telephone system, or that it is prevented from reasonably enforcing those standards. Apparently the establishment of such a program involves a considerable delay. In the interim, since damage to the telephone system has not been demonstrated, telephone subscribers who choose to use the Phonemaster should be permitted to do so without incurring additional charges for connecting devices.

We order decision No. 80247 annulled. The Commission's order requiring the utilities to supply the protective devices to Phonetele customers without charge (see fn. 1, ante) is continued in effect unless and until the Commission, after further proceedings, finds, in accordance with the standards set forth above, that the Phonemaster will have an adverse effect upon the telephone network, or until an appropriate certification program is adopted and implemented by the Commission.

MOSK, J.

GG-4

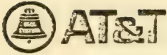
WE CONCUR:

WRIGHT, C. J.
McCOMB, J.
TORRINER, J.
BURKE, J.
CLARK, J.
*TAYLOR, J.

*Assigned by the Chairman of the Judicial Council

^{4/} Pacific's advice letter to the Commission regarding the new call diverter apparently was voluntarily withdrawn after Phonetele objected.

^{5/} The parties presented to this court, both immediately before and after oral argument, a voluminous amount of material involving issues not directly related to decision No. 80247. For example, the parties argue the validity of tariff 135-T in the light of recent federal decisions, and the legality of certain Commission actions taken subsequent to decision No. 80247 relating to the certification program as well as the adoption of possible alternatives to tariff 135-T. We are not required to and do not reach these matters in the present opinion.



II-1

February 13, 1970

Mr. Brouette, Project Engineer
Carrillo Enterprises
6110 Santa Monica Boulevard
Hollywood, California 90038

Dear Mr. Brouette:

This is in reply to your request of February 5, 1970. We have enclosed copies of our Voice Technical References, as listed below, for your use. This material is specifically prepared for designers of voice communications equipment and systems who intend to connect their equipment to the Bell System telecommunications network. Each reference includes interface specifications and a technical description of the operation of the voice connecting arrangement.

Knowing of your interest in this matter, we have included you on our mailing list to receive all future Voice Technical References. Please note that the enclosed Technical References are in preliminary format and subject to revision.

It is our desire to design and engineer new voice connecting arrangements which provide the most flexible use of the public network by customer-provided equipment, and at the same time provide for protection of quality and cost of service for all users.

If you are interested in obtaining further information for any of these arrangements, please feel free to call me on Area Code 212 393-2477 and I shall arrange to obtain it for you.

Very truly yours,

Diane E. Polacik

Miss Diane E. Polacik
Engineering Assistant
Voice Technical References

Enclosures

Technical References
Voice Connecting Arrangements
2A, 30 Type Voice Coupler, CDH,
3A, 1A, CD1, CD4, CD5, CDS4W, CDY,
CD7&8, CD9, CAU, CD6, SU7, CDX, RTT

TESTIMONY OF ROBERT L. FEINERCPUC CASE NO. 9625

1. Q. Please state your name and address.

A. My name is Robert L. Feiner. My business address is 15414 Cabrito Road, Van Nuys, California.

2. Q. What is your business occupation?

A. I am the President and Chief Executive Officer of Phonetele, Inc.

3. Q. Please describe your background and educational experience.

A. I have a Bachelor of Science degree in Business Administration from the University of California at Los Angeles with a major in marketing and a postgraduate major in real estate. I have been involved in multi-million dollar real estate projects as a broker, builder, and property owner. I served for ten years on the Board of Directors of a public company involved in the biochemical business and was deeply involved in its corporate finance activities, which included dealings with the investment banking community for private placements, debenture financing, and prospective public offerings. I was a founder and the first President and Chief Executive Officer of a company in the microfilm business which is now a public company. I am a founder of Phonetele, Inc. In both the microfilm company and Phonetele my job responsibility required close contact with the investment banking community. In my present capacity I have arranged a line of accounts receivable financing, a long term business loan, and a number of private placements for

Phonetele. My responsibility for corporate financing keeps me in continual contact with the investment banking community. The objective of Phonetele, Inc., is to eventually become a public company and therefore I am kept aware of public financing considerations. That awareness has been kept sharp by having long subscribed to and the consistent regular reading of Fortune Magazine, Forbes, Business Week, Dun's, Nation's Business, Over-The-Counter Securities Review, The O-T-C Market Chronicle, Harvard Business Review, California Business, The Wall Street Journal, and occasionally Barron's and The Wall Street Transcript. To assist us in our objective of achieving public funding, we have in the past used the consulting services of A. D. Little by purchasing a feasibility study. Our auditor, Peat, Marwick, Mitchell & Company also provides us with consulting services. In addition we are utilizing the consulting services of PFO Enterprises, Inc. to help us achieve our objectives. Consequently, I must keep keenly abreast of financial considerations.

4. Q. What is the purpose of your testimony?

A. I will describe the economic impact on the earnings per share of Pacific Telephone and/or AT&T as a result of competition in the customer equipment business. I will also describe how the concept of "end-to-end service" and the "common carrier principle" is fallacious in that the customer equipment market is not embraced by a "natural monopoly," as the carriers continually allege.

5. Q. Why is the question of earnings per share of Pacific Telephone and/or AT&T pertinent to this proceeding?

A. In opposing competition there have been two dominant themes expounded by the carriers. The first is the allegation that certified customer equipment will cause deterioration of telephone service and the second is the allegation that competition will cause residential telephone rates to rise. I have attached a number of Exhibits which generally evidence this. EXHIBIT KK contains excerpts on competition from the remarks of John deButts in AT&T's 1973 Annual Report. EXHIBIT LL contains comments on competition from Mr. deButts' report to the New York Society of Security Analysts. EXHIBIT MM contains excerpts on competition from the speech made by Mr. deButts at the 1974 Annual Shareholders' Meeting, and finally, EXHIBIT NN contains excerpts on competition from the Prospectus on the recent 500 million dollar AT&T debenture offering.

6. Q. What do these Exhibits have to say about the effect of competition on earnings?

A. That is what is really fascinating about them. The subject is really glossed over. The New York analysts, however, appeared inquisitive after Mr. deButts stated that he did not think competition loomed "very large in the context of AT&T as an investment prospect," and also that "we are not trying to protect the bottom line of AT&T or the Bell System - we can do that with or without competition." He states this in EXHIBIT LL, Pages 15 and 18 of the report to the analysts.

7. Q. So what exactly is the point that you are trying to make?

A. The point that I am trying to make is that AT&T's motive in opposing competition is not network harm or cost to the residential subscriber - those are phony arguments, but highly effective ones. I also will make the point that the real issue is earnings per share, that Mr. deButts disclaimed too much to the analysts. And in fact, these disclaimers and the general failure to disclose the problem generally may have violated disclosure laws, not just to shareholders, but most seriously to bondholders, particularly under the recent offering.

8. Q. Are you saying that Mr. deButts is being untruthful?

A. No. I will not say he is knowingly or intentionally being untruthful. I do believe he is getting bad counsel. That is a common problem for Chief Executives, even Presidents of the United States. I just don't believe he's telling the whole story.

9. Q. Why do you think network harm is a phony argument?

A. I can only point to Phonetele's recent California Supreme Court Decision, our general experience with the issue, and most significantly, to the extensive arguments we made in our voluminous filings in this Case.

10. Q. Why do you believe the argument that residential rates will rise is phony?

A. The NARUC Report After Investigation supports this contention but only after prefacing this conclusion by stating it would occur

"under current regulatory practices." These practices need only be changed to foreclose that occurrence, and even this Commission recognized this fact in its originating order in this Case, though it later changed its position. Also, the recent Dittberner Report done for the Office of Telecommunications Policy takes just the opposite view, that is, residential subscribers are subsidizing business. So we have totally opposite views. Everybody will probably argue the issue for years but even NARUC recognized that it is really an issue of "regulatory practices."

11. Q. Are you saying that investigations into economic impact questions are not pertinent at this time?

A. No, I am not saying that. There should be economic inquiries. But I am saying that they should not be conducted in the context of trying to outlaw or emasculate interconnect competition. Unfortunately, I believe that has been a subtle theme of such investigations. On the other hand, regulators should certainly investigate what economic dislocations will occur with competition and I believe it is their duty to do so. And, I certainly do not believe an economic inquiry is appropriate in this case which alleges to be an inquiry into certification. I believe the Court will agree with that.

12. Q. In what other ways do you believe economic inquiries have been deficient?

A. Phonetele participated in the North Carolina case, the NARUC investigation, is participating in FCC Docket 20003, and is involved

in this Case. In these cases the question of earnings per share is not an issue when it is, in my belief, the single most threatening issue facing the carriers with the advent of competition.

13. Q. Can you explain what is meant by earnings per share?

A. It is simply calculated by taking after tax earnings and dividing them by the total number of common shares outstanding.

14. Q. Why is this figure important?

A. I have attached as EXHIBIT 00 excerpts from AT&T's Annual Statistical Report for 1973. It shows that AT&T follows the common practice of monitoring earnings per share and its price earnings multiple as methods of measuring the company's performance. The price earnings multiple is frequently referred to as the PE ratio.

15. Q. What is a PE ratio and why is it significant?

A. Earnings per share times the PE ratio equals market price. Therefore, the PE ratio is a measurement by which the stock market places a value on the company's stock.

16. Q. Why is that significant?

A. The value of the stock is important to a company's ability to raise capital in the market place either through equity or debt offerings. For a capital intensive company like AT&T, market value is particularly critical. In fact, it is generally recognized that AT&T raised the recent \$500 million through debt instead of equity because the price of its stock was much too low. The price earnings multiple in 1973 was at a low (EXHIBIT 00). The projected impact

on earnings per share by excessive dilution required to raise the one-half billion sum through an equity offering in a poor market probably exceeded the cost of paying an interest rate on debentures that exceeded AT&T's rate of return. AT&T had to raise this money at the highest interest rate ever, an interest rate that exceeded its rate of return, and that hurts earnings per share.

17. Q. How can a high interest rate on a debenture affect earnings per share?

A. A rate of return is allowed on the rate base. The base is essentially the sum of all investments consisting of both debt and equity. If the overall rate of return allowed a carrier was say, 8.5%, and the interest rate on a debenture was say 7.0%, the 1.5% differential would accrue to the benefit of the shareholders. But in the converse, if the garnered rate of return was 8% and debentures cost 9, as they nearly did, this differential would be borne by the equity holders and would result in a lower earnings per share and a lower market price for the shares based upon the PE ratio.

18. Q. Why would this concern AT&T? Couldn't they just seek a higher rate of return from the regulators?

A. Rates of return and interest rates are both at highs, the former because of the latter. The allowed rise in rates of return have generally lagged rising interest rates and there will no doubt be pressure to reduce them if interest rates drop. Rates of return would then likely lag falling interest rates, thereby resulting

in some "windfall" to the carriers, particularly if they move swiftly into the debt market. Of course, such a "windfall" might not be realized if rebates are ordered and if history tells us anything, that would likely happen to Pacific.

19. Q. You have shown that the price earnings ratio is at a low, what about earnings per share?

A. Earnings per share are at an all-time high, and that is particularly disconcerting combined with the price earnings ratio being at a low. EXHIBIT PP is interesting. By taking data from EXHIBIT OO there is revealed the recent trends in the incremental percentage changes in earnings per share after discounting the impact of changes in revenue. Though this is a cursory analysis, it reveals a rather poor performance in the "adjusted" and "analyzed" earnings per share, even though they have been increasing. 1973 was obviously a turnaround year and the improvement in actual performance is measured by the 2.20% figure. It is this column of figures that is the focus of this discussion.

20. Q. Why do you say it is the focus of this discussion?

A. Because in the following testimony I will attempt to show how competition will materially affect this column of figures and why in my belief the telephone utilities, all of them, are fighting competition so vigorously. They realize that there would be little legislative or public sympathy for the earnings of the telcos, so they have focused the controversy, brilliantly so, on "harm" to the network and cost to the residential subscriber.

21. Q. Then how will competition affect this column of figures?

A. Mr. Fochler of Pacific Telephone stated in his testimony that "total revenues for those services already affected by replacement with interconnect equipment were 255 million dollars, more than 250 million of which was for PBX, key and data equipment." This is fairly well confirmed in EXHIBIT QQ which is Page C-11 from the NARUC Report After Investigation dated May 15, 1974. The 1974 Bell market for PBX's is \$1263 million, and for KTS \$1308 million, or a total of \$2571 million. Considering that Pacific represents roughly 10% of AT&T, these figures suggest an estimate of \$257.1 million for Pacific. To simplify this discussion I will settle on the figure of \$250 million as representing the PBX and KTS market for Pacific and momentarily set aside considerations of the "other" equipment and data equipment. The information is too sketchy to do otherwise. According to NARUC, per EXHIBIT QQ, by 1974 the Maximum Baseline PBX Market will be \$3277 million and for KTS it will be \$3581 million, or 47.78% and 52.22% respectively of the total of these figures. The minimum market penetration by 1984 is projected to be 39% and 15% respectively. Now applying the 47.78% and the 52.22% to the present aforementioned settled upon \$250 million market at issue, we arrive at \$119,450,000 and \$130,550,000 breakdown as to PBX and KTS equipment respectively. We also see that the penetration is projected as 39% of this \$119,450,000, or \$46,585,000, and 15% of \$130,550,000, or \$19,583,000, or a total of \$66,168,000 of the \$250,000,000.

22. Q. So it is your contention that Pacific is, by your extrapolated analysis, threatened to the extent of 66 million`dollars of the \$250 million. What effect does that have on earnings per share?
- A. Because this loss of business would be on telephone company provided equipment, Pacific would be losing a substantial portion of its rate base. Therefore, on such a revenue loss we need to estimate how much of that \$66 million would be actual after tax earnings. ✓
23. Q. Did you arrive at such a calculation?
- A. Not as such because definitive data was not readily available to me to make such a determination. But I did inquire of Mr. Paul Popenoe of the Commission Staff realizing he was knowledgeable. I asked him to make an estimate.
24. Q. What was his estimate?
- A. He estimated that the loss to Pacific Telephone in after tax earnings may be as high as 25% of that \$66 million, or \$16,500,000.
25. Q. In other words, if the NARUC minimum market penetration figures for 1984 are accurate, the vulnerability on 1973 earnings could have been \$16,500,000.
- A. That is correct. Of course that was NARUC's minimum penetration estimate. There have been other estimates that have been higher. It should also be remembered that earlier we did exclude "other" equipment and data equipment. Also, there has been no analysis at all of the impact on earnings per share due to the specialized common carriers.

26. Q. If that \$16,500,000 figure was correct, what impact would that have on earnings per share for Pacific?

A. To analyze that we have to look at Pacific's 1973 net after tax earnings which totaled \$257,894,061. But Pacific has pending the possibility of \$42,487,000 reduction in revenue and earnings for 1973 due to a potential rebate. Pacific has not been faring well in this regard and their earnings may be adjusted downward to \$215,407,061, so I will use that figure. A reduction in this latter amount by \$16,500,000 is quite substantial, being equivalent to 7.65%. When we go back and look at the net percentage variation in the earnings per share shown in the last column of EXHIBIT PP, this 7.65% figure becomes substantial, very substantial. The positive 2.20 figure for 1973 would have been a negative 5.45%. When one looks at the considerable variations in this last column over the years it should be evident that an additional negative impact of 7.65% surpasses the customary forces that have caused such variables to occur over those years. In fact when we take this last column of figures covering fourteen years and average them the variable is a negative 1.63%. So add to this average 14 year negative of 1.63% the threat of an additional negative 7.65%, the concern must be profound. To put it yet another way, 7.65% is almost 4 1/2 times the 1.63% figure. In other words, the effects of competition can impose a variation on the real earnings per share as a force equal to 4 1/2 times all of the other combined economic forces that have been working against AT&T in the past fourteen years.

27. Q. Do you really believe these numbers are accurate?

A. There is absolutely no way of characterizing extrapolated projections as accurate. But I think what I have created is a reasonable hypothesis based upon the numbers of others. I did not create any of these numbers myself. At least the basis by which I arrived at the 7.65% and 4 1/2 times figures is clearly set forth. Therefore anyone can challenge any part of this hypothesis. For example, is the minimum market penetration estimated by NARUC correct, will Pacific have to make the rebate, is Mr. Popenoe's estimate of possible net earnings being one-fourth of the \$66 million correct, if not, what is it? The point is not whether the 7.65% and 4 1/2 times figures are correct, that is really not important, per se. What is important is the obvious fact that there will be a substantial impact to some degree on the net earnings of the carriers. It is for this reason that I believe the carriers are fighting competition. They don't care about residential rates. They are using that argument to protect their shareholders, not the residential subscriber. And the same goes for the network harm issue. They know certification can work and that is evidenced by their early support of certification, on the record, in the Phonetele Case.

28. Q. If what you say does occur, won't this cause rates to rise in order to compensate for the loss to the shareholders?

A. Rates are increased for primarily two reasons. The first reason is to cover increasing costs of doing business. The second

reason is to allow a greater rate of return to continue the utility as an attractive investment in relation to rising interest rates, i.e., other investment opportunities. Neither of these two situations are at issue here. What is happening is competition is displacing the utilities rate base which doesn't affect the rate of return but does affect the net earnings. Decreased earnings due to a decreased rate base would not require a rate increase and could not justify it. In fact, from a practical standpoint it would seem impossible to accomplish a rate of return increase if this was at a time when the rate of return was already at a high and interest rates were dropping.

29. Q. But then doesn't this mean that the utility would be an unattractive investment and wouldn't regulators nevertheless have to grant rate increases?

A. If the earnings per share dropped and the price earnings ratio remained the same, the net effect is that the price of the stock would drop to the point where it would once again be an attractive investment. This function is basic to the market place. The shareholders may have substantial market losses, but regulators could hardly increase rates to save the shareholders' personal investment. It should be remembered that this occurs gradually so it's not traumatic. In fact, looking at EXHIBIT 00 shows how AT&T's price earnings ratio has performed poorly. It is the market place that determines whether an investment is attractive in relation to alternative investment opportunities. Essentially, stocks rise and

fall in the market place because they compete to remain attractive investments. AT&T is no different. As long as AT&T's rate of return in relation to interest rates is attractive, the market will adjust the price of AT&T stock according to its earnings to allow AT&T to continually compete as an attractive investment.

30. Q. Are you predicting substantial paper losses to shareholders of the telephone utilities?
- A. Over a longer term it appears this will be the net effect of competition, but it no doubt will be gradual. The one thing that could obscure the visibility of this effect tremendously is a continuing high rate of inflation. But this poses another serious effect that can compound the problem, and that is the fact that rate increases lag rising costs. But it is very difficult to predict the impact other than the fact that there will be one. What is really required is detailed analysis on this whole subject. It is the purpose of my testimony to ask the questions, not necessarily to provide the answers. It is the purpose of my testimony to show that the question of earnings simply has to be the real reason why the carriers are fighting competition so hard. If we are to make an economic inquiry, then inquiry into the question of earnings is essential. In that way all parties can see in better perspective the opposing arguments set forth by the carriers on the subject of competition.
31. Q. Are you suggesting that the carriers have been less than forthright in the arguments against competition?

A. I think they have been evading the earnings issue very effectively. In regard to the question of candor I have attached the interesting EXHIBIT RR. Because AT&T has cloaked so many of its arguments in tradition, the words of Theodore N. Vail, the real founder of AT&T, are illuminating.

32. Q. Doesn't this reference question the honesty of Mr. deButts' statement?

A. I don't believe it does that at all. If Mr. deButts was on a witness stand, which he is not, I have no reason to believe he would be any less forthright and honest than Mr. Vail. He would either confirm what I am saying or demolish my arguments, or perhaps answer somewhere in between. I believe the reference to Mr. Vail does call on Mr. deButts to respond publicly as though he were on a witness stand. But let's understand Mr. deButts' role. He is AT&T's super-salesman. He even made a special trip to Europe to extol the virtues of AT&T to the European financial community. He has to hedge his sales pitch. Look at the first question an analyst asked him, the one on Page 17. Mr. deButts hedged the answer like a skilled politician, concluding with the statement that "we are not trying to protect the bottom line of AT&T on the Bell System - we can do that with or without competition." I believe the first part of that statement is a salesman talking, and the second part is unsupported by the evidence. If AT&T had been able to "protect the bottom line" it would not have incurred the negative 1.63% earnings record. And if it cannot accomplish that, I do not see how it can further

"protect the bottom line" against an additional negative 7.65% due to competition. On the other hand, Mr. deButts is not to be underestimated. His optimism has solid foundation in his accomplishment of the 1973 turnaround.

33. Q. When Mr. deButts expressed the opinion that AT&T can protect its bottom line, couldn't it be because he believes regulators will increase rates to afford that protection?

A. As I said, history does not support that. There is no support to the suggestion that regulators will increase rates to protect earnings per share, rate of return yes, earnings per share no. I believe the regulators try to give AT&T an ample rate of return to remain attractive in relationship to other investment opportunities and they essentially tell AT&T to protect its own bottom line by competent management. I will state again, I do not believe it is the responsibility of regulators to tax the subscribing public on behalf of AT&T's shareholders.

34. Q. At the beginning you stated that the purpose of your testimony was to also describe how the concept of end-to-end service and the common carrier principle were fallacious and that the customer equipment market is not embraced by a natural monopoly. Would you explain this?

A. The concept of end-to-end service and the common carrier principle is based upon the allegation of the carriers that they have a

natural monopoly. This is why they oppose competition, even in the customer equipment market. I believe the expression "common carrier principle" is a euphemism for natural monopoly. It is a more tenable expression. It has a nice ring to it. However, EXHIBIT SS-1 shows that a telephone company is not a common carrier.

35. Q. Who has alleged that AT&T has a natural monopoly?

A. Mr. deButts makes this statement in the 1973 Annual Report of AT&T which is attached as EXHIBIT KK and he states, quote

I would like to turn now to a question of particularly grave import for the future of telecommunications in the United States - and that is the degree to which competition should obtain in an industry recognized throughout most of its history as a natural monopoly. Unquote.

Mr. Robert D. Lilley, President of AT&T, made the following statement as quoted in the May 23, 1974 edition of Public Utilities Fortnightly, quote

From the start, the Bell system has had to face up to the peculiar problems and responsibilities of a business organized and operated along lines that run counter to widely accepted ideological principles in this country. We are a natural monopoly. We are vertically integrated. We have traditionally opposed competition in the broad-scale provision of telecommunications service. We have always seemed to be 'agin' the commonly accepted truth that, in all times and all circumstances, the free reign of competition will serve the public interest. Unquote.

36. Q. Why is the question of natural monopoly important?

A. The argument of natural monopoly appears to be formulating as a major issue. It certainly is an issue raised in the FCC economic

inquiry Docket 20003. The Chief of the Common Carrier Bureau, Walter Hinchman, was quoted in the May 13, 1974 edition of Telecommunications Reports as follows, quote

The time is ripe, and perhaps even long overdue, to begin to define the meaning of a natural monopoly or monopolies in the communications field: What is the economic, operational, or other basis for labeling a given communications activity a 'natural monopoly'? What are the bounds and inter-relationship among any such natural monopolies? What are the dynamic vs. static characteristics and forces at play, and how do these affect the concept of a natural monopoly? Unquote.

37. Q. What is a natural monopoly?

A. That of course is the real question. FCC Docket 20003 on Page 5 asks that each party, quote, will address the question of whether the supply of customer-operated facilities is a natural monopoly according to accepted economic definition of that term, unquote.

38. Q. Then what is the accepted economic definition of that term?

A. After receiving Docket 20003 I asked myself that very question. My 450,000 entry dictionary contained no definition. This prompted me to visit the UCLA Graduate School of Business Administration Library. There I examined over forty texts on economics and utility regulation. The definition is generally a dissertation of some kind as opposed to a dictionary-type definition, with one exception.

39. Q. How was it defined?

A. It was defined mostly predating any of the present controversy, and therefore is impartial. Because most of it is in the form of lengthy explanations, I have attached numerous excerpts attached as EXHIBIT SS. I have carefully provided specific references even to the page of the book to facilitate the research of others. To specifically answer the question as to the accepted economic definition, it is for each party to come to their own conclusion, independently, even though I have made comments.

40. Q. Well then, is the customer equipment market a natural monopoly of the telephone utilities?

A. I do not see how anyone can conclude from a study of EXHIBIT SS that the customer equipment market is a natural monopoly. The telcos have maintained and presently do maintain an artificial monopoly over this market, and I believe unlawfully so, precisely because it is not a natural monopoly. This is the reason that in Phonetele's OMNIBUS PETITION filed April 19, 1974, we petitioned the Commission, quote, to investigate whether or not the telephone utilities have been, and are presently unlawfully monopolizing the customer equipment market, unquote.

41. Q. What action has the Commission taken?

A. None. I do not believe that the economic inquiry in this Case can be complete without deciding this basic economic question. Such a decision is essential to decide antitrust matters. Inasmuch as the Supreme Court has instructed the Commission to be solicitous

on antitrust matters, the Court has, in my view, ordered the Commission to decide this matter, i.e., to determine whether the telephone utilities are unlawfully monopolizing the customer equipment market.

42. Q. Why in your view don't the telephone utilities have a natural monopoly?

A. That is best answered by referring to my specific comments in EXHIBIT SS.

43. Q. Don't you believe that your findings in EXHIBIT SS fail to support the concept of specialized common carriers as an acceptable form of competition?

A. No, though it would certainly appear that way from what I have provided. Justifying specialized common carriers is quite possible but it is a score times more complex to do. It would have required much more extensive research and numerous more references of the type I have made. What is really required is legal research instead of the mere culling of definitions. I did not even try to discuss specialized common carriers because that area of competition is not pertinent to this Case.

EXHIBIT PP

	(1) Revenue (000000)	Per Cent Increase	(1) Earnings Per Share	Per Cent Increase	Per Cent Increase In Earnings Per Share Not Due To Revenue Increase
1960	\$ 7,920		2.77		
1965	\$11,062	(2) 1.93	3.41	(2) 4.60	(2) 2.67
1966	\$12,138	09.72	3.69	08.21	(1.51)
1967	\$13,009	07.17	3.79	02.71	(4.46)
1968	\$14,100	08.38	3.75	(1.06)	(9.44)
1969	\$15,684	11.23	4.01	06.93	(4.30)
1970	\$16,955	08.10	3.99	(.05)	(8.15)
1971	\$18,442	08.77	3.92	(1.76)	(10.53)
1972	\$20,904	13.34	4.34	10.71	(2.63)
1973	\$23,527	12.54	(3) 4.98	14.74	2.20
14 Year Average					(1.63)

(1) Source: AT&T Annual Statistical Report for 1973, Pages 2 & 3.

(2) Yearly Average.

(3) 1973 Earnings Per Share was \$5.06 including \$0.08 extraordinary gain in the sale of COMSAT.

C-11

EXHIBIT QQ

TABLE C-3

PROJECTED BELL/INTERCONNECT PBX MARKET
SHARES AT MINIMUM INTERCONNECT PENETRATION

Year	Maximum Baseline PBX Market (\$ Million)	Interconnect		Bell System	
		Minimum PBX Rev.* (\$ Million)	Market Share (%)	Maximum PBX Rev. (\$ Million)	Market Share (%)
1974	1263	82	6	1181	94
1975	1390	115	8	1275	92
1976	1529	156	10	1373	90
1977	1682	212	13	1470	87
1978	1850	291	16	1559	84
1979	2035	372	18	1663	82
1980	2238	481	21	1757	79
1981	2462	625	25	1838	75
1982	2708	793	29	1915	71
1983	2979	1010	34	1969	66
1984	3277	1265	39	2012	61

TABLE C-4

PROJECTED BELL/INTERCONNECT KTS MARKET
SHARES AT MINIMUM INTERCONNECT PENETRATION

Year	Maximum Baseline KTS Market (\$ Million)	Interconnect		Bell System	
		Minimum KTS Rev.* (\$ Million)	Market Share (%)	Maximum KTS Rev. (\$ Million)	Market Share (%)
1974	1308	17	1	1291	99
1975	1446	29	2	1417	98
1976	1599	46	3	1553	97
1977	1769	69	4	1700	96
1978	1957	99	5	1858	95
1979	2164	137	6	2027	94
1980	2393	186	8	2207	92
1981	2647	248	9	2399	91
1982	2928	325	11	2603	89
1983	3238	423	13	2815	87
1984	3581	545	15	3036	85

* Denotes minimum revenue loss to Bell as measured by its tariffs and not revenues actually received by interconnect industry.

Title: "THEODORE N. VAIL: A BIOGRAPHY"
Author: Albert Bigelow Paine
Publisher: Harper & Brothers (New York and London)
Date: 1921

When lawsuits developed, as they were bound to now and then, there was never any question as to what Theodore Vail would do on the witness stand. He would tell the truth—all of it, and his case would stand or fall, accordingly. Once he said:

"I have very little use for a man who has to win a lawsuit through a technicality—trickery—and I am opposed to concealment in trying a case. My idea of a lawsuit is to get out the facts, *all* of the facts, then see where the rights are. I am opposed to all forms of concealment in litigation."

He was a disconcerting witness to the lawyers of the other side. Edward E. Loomis once said to the writer:

"You should see Mr. Vail on the witness stand with the lawyers trying to confuse him. He will listen to one of their misleading questions and then answer, 'What you want me to say is so and so, but that wouldn't be true, so I am not going to say it. What happened was this': He then proceeds to give them a clear statement of the case that cannot be attacked from any point. To examine Mr. Vail is likely to give a lawyer a liberal education on the subject in hand, but it also, sometimes, almost gives him nervous prostration." (Pages 239 and 240)

Title: "DICTIONARY OF ECONOMICS"
 Author(s): Harold Sloan & Arnold Zurcher
 Publisher: Barnes & Noble (New York)
 Date: 1949

"NATURAL MONOPOLY. 1. A monopoly due to natural conditions. For example, the natural conditions may be a peculiarity of soil within a small area enabling the owner or owners of that area to produce a product that cannot be grown elsewhere, or the existence of a limited supply of mineral wealth coming under the control of a single enterprise. 2. A monopoly due to characteristics inherent in the business. The characteristics are usually those which make competition self-destructive and hence incompatible with the public interest. Such conditions have been met by subjecting such businesses to government control as in the case of PUBLIC-SERVICE CORPORATIONS. See MONOPOLY." (Page 303)

"MONOPOLY. Usually the condition which exists when there is a single control over all the supply of a product, thus permitting the release of the supply at such a rate as will yield the most profitable price. The monopolist cannot dictate the schedule demand for his product. He can only discover it. But he can dictate the schedule supply. This enables him to offer for sale the particular quantity of his product that, according to the schedule demand, will yield him the most profitable price. This price may be relatively high or low depending upon the nature of the product and the nature of the schedule demand." (Page 289)

FEINER COMMENT: Only 2) above, if the customer equipment market had "characteristics inherent in the business," and if indeed such competition is "self-destructive and hence incompatible with the public interest," could the arguments of the telephone utilities be supported. Following definitions will help clarify this.

"COMMON CARRIER. An individual or company, normally regulated by public authority and operating under a franchise, which engages in the transportation of goods or persons in return for a fee, such service being available at the same rates for all. Railroads, truck and bus lines, commercial aircraft, ferries and certain other water-borne craft, and pipelines are considered to be such carriers, but telephone and telegraph companies, which convey intelligence, are technically not so considered, although they may be subject to the same rules governing common carriers." (Page 85)

FEINER COMMENT: There can be no "common carrier principle" as applied to the telephone company because the telephone company is not a common carrier.

Title: "PUBLIC UTILITY REGULATION"
Author(s): Herman H. Trachsel, Ph.D.
Publisher: Richard D. Irwin, Inc.
Date: 1947

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"Natural monopolies exist where the number of persons who may engage in a certain undertaking is limited by the physical conditions under which the enterprise is conducted, or where the cost of providing a necessity increases with the number of competitors.

"A large number of the enterprises that are now classified as public utilities and regulated as such are natural monopolies. Their business is such as to virtually exclude competition. Such public utilities as telephone companies, waterworks, gas companies, electric plants, and street railways are natural monopolies. Of course, it would be possible to duplicate these companies and have two or more of each occupying the same streets and competing against each other, but duplication such as this is not economical. The amount of fixed capital is so greatly increased that the only possible outcome is higher prices or poorer service. If the utility must provide facilities adequate to serve all of the citizens and then has only half of them as customers, it follows that the charges must be higher or the profits reduced." (Page 7)

FEINER COMMENT: Telephone companies are defined as natural monopolies, explained as being so based upon the classic concern of needlessly reduplicating facilities. It is obvious that this definition refers to the telephone network, predates by ten years the Hush-A-Phone decision, and never contemplated the customer equipment market. Simply stated, the definition is shallow.

Title: "PUBLIC UTILITY ECONOMICS"
 Author(s): C. Woody Thompson, Ph.D.
 Wendell R. Smith, Ph.D.
 Publisher: McGraw-Hill
 Date: 1941

SS-3

"This leaves the monopoly variant to be considered. As was seen in the older cases, the phrases 'practical monopoly' and 'virtual monopoly' played important roles in the decisions. What, therefore, may be the kinds of monopoly that will be considered as the basis of the public interest status? At this point, it may be said that any monopoly capable of being broken by available satisfactory substitutes will not be accepted by the courts as a basis for public interest designation." (Page 67)

FEINER COMMENT: Customer owned and maintained equipment is an "available satisfactory substitute."

"Secondly, there is a monopoly based on natural limitations in supply or conditions of service. A company controlling the only available source of water of a community has a monopoly of supply. This same situation has often existed in the supply of natural gas. A warehouse located at or near a railroad terminal has a natural situs monopoly. This was the situation in the Munn case. So also has a railroad that occupies the only available pass through a mountain barrier. In the case of the usual public utilities, each occupies some portion of city streets and alleys or other public property. There is definitely a physical and economic limit to these public facilities, and therefore, if for no other reason, their users have at least a quasi monopoly of situs. Some utilities deal in services that involve, in a sense, a limitation of time. Such are the services of the telecommunications companies. The matter of speed and lack of time to sample possible competing communication services give each of them a genuine monopoly." (Pages 67 and 68)

FEINER COMMENT: "A monopoly based on natural limitations" as discussed here could only relate to the telephone network and not to the customer equipment market.

"More important, however, than all these causes of monopoly is the condition of economic monopoly, a characteristic of all public utilities. Although the economic circumstances making for this will be presented in the next chapter, suffice it to say there are many factors that tend to eliminate competition in the utility field, even though all other limitations were to be removed. The cost of construction, the low ratio of income to investment, the impossibility of ideal load factors, and the legal necessity of building in advance of needs, all

tend together to make the utility operate under conditions of decreasing cost. Such a situation inevitably makes competition quite unstable and in the end, short of governmental interference, leads to combination and monopoly." (Page 68)

FEINER COMMENT: Once again, this discussion refers to the network and could not refer to the customer equipment market.

SS-4

Title: "THE FEDERAL ANTITRUST POLICY"
 Author(s): Hans B. Thorelli
 Publisher: George Allen & Unwin, Ltd. (London)
 Date: 1954

SS-5

"Like Henry Carter Adams, Ely at the end of the 1880's recognized the need of a differentiated view of the trust problem. Monopolies were essentially of two kinds, natural and 'artificial.' In industries where monopoly is a natural condition, 'Competition is impossible, and attempted competition wastes capital and ultimately raises prices.' Ely did not hesitate in recommending public ownership and operation of all public utilities. This would prevent extortion and no less important, eliminate odorous political corruption invariably associated with monopolies. Clean government and private monopoly were actually incompatible. Furthermore, 'a correct policy in regard to this natural monopoly helps to keep competition alive by preventing . . . unnatural and artificial monopolies' in other industries." (Page 124)

FEINER COMMENT: Here natural monopoly is defined where "competition is impossible" and this does not apply to the customer equipment market, because such competition will not "waste capital" and will not "ultimately raise prices," though some price adjustments may be necessary.

"The statement just quoted indicates that the new influences in their assimilated form did not prevent Ely from placing substantial reliance on competition as an efficacious regulator of a wide area of economic life. In an address delivered in January 1889, he claimed that 'competition is a good thing where it is possible.' And he was beginning to believe that competition was possible in most if not all industries not based on natural monopoly. Most monopolies in manufacturing industry were definitely not natural. They were artificial, based on reckless use of special legislation or other public grants of privilege or on the discriminatory policies regularly pursued by natural monopolies." (Page 124)

FEINER COMMENT: The customer equipment market is "not based on a natural monopoly" and this monopoly is "based on reckless use of special legislation..." (tariffs) "...or other public grants of privilege or on the discriminatory policies..." (tariffs) "...regularly pursued by natural monopolies" (natural as to the exchange network only).

Title: "PRINCIPLES OF PUBLIC UTILITY RATES"
 Author(s): James C. Bonright
 Publisher: Columbia University Press
 Date: 1961

SS-6

"The familiar statement that a public utility is a 'natural monopoly' is meant to indicate that this type of business, by virtue of its inherent technical characteristics rather than by virtue of any legal restrictions or financial power, cannot be operated with efficiency and economy unless it enjoys a monopoly of its market. So great are the diseconomies of direct competition that, even if it gets an effective start, the competition will probably not long persist if only because it will lead to the bankruptcy of the rivals. But even if the competition is long lived, as has occasionally happened when the rivalry has taken a restrained form, it is wasteful of resources because it involves unnecessary duplication of tracks, of cables, of substations, etc." (Page 11)

FEINER COMMENT: Once again this natural monopoly definition refers to the network, not to the customer equipment market.

"What then are the special characteristics of a public utility enterprise or plant which give it a natural monopoly character not conceded to other industries? An answer frequently given is that public utilities operate under conditions, or 'under the law,' of decreasing costs, whereas competitive enterprises operate under conditions either of constant cost or else of increasing cost. This means that the larger the output of a utility plant per day or per month or per year, the lower will be the cost of production and distribution per kilowatt hour, or per thousand cubic feet of gas, or per passenger mile, etc. Consequently, only a company enjoying a monopoly of the supply of service in a given area can operate at maximum economy.

"This rationale of the natural monopoly status of the public utility industries was given currency, years ago, by the late Professor Henry C. Adams, and has been repeated, with many variations, down to this day. Properly qualified, it remains valid. But a restatement is required. For, taken alone, the well-known economies of large-scale enterprise are by no means peculiar to the utility business. Instead, they are enjoyed by utilities in common with many unregulated types of enterprise, including steel companies, automobile companies, and chemical companies. Compared to some of the giant manufacturing companies and manufacturing plants, most utility systems are of a small-scale nature if measured by any of the conventional units of size.

"What favors a monopoly status for a public utility is not the mere fact that, up to a certain point of size, it operates under conditions

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of decreasing unit cost - an attribute of every business, including a farm or a hand laundry. Nor is it even due to any indefinite extension of the declining-cost portion of a curve relating unit costs of production to scale of output. It is due, rather, to the severely localized and hence restricted markets for utility services - markets limited because of the necessarily close connection between the utility plant on the one hand and the consumers' premises on the other. As a deterrent to successful competition, this market restriction is far more serious than is the case with manufacturing companies which can ship their products throughout a wide region or even throughout the nation. An automobile plant may be large enough to enjoy the full economies of large scale without requiring more than a fraction of the American car market to sustain full-capacity output. But a gas distribution system in Yonkers, N.Y., or an electric distribution system in Evanston, Ill., has a market limited to the load of one city. Even if permitted to supply the entire load, the local distribution system will still be engaged in fairly small-scale business. Were it compelled to share its limited market with two or more rival plants owning duplicate distribution networks, the total cost of serving the city would be materially higher.

"What has just been said about the interplay of the factors of economies of scale and of localized markets points to the significance of the fact, already noted earlier in this chapter, that public utility companies are essentially transportation or transmission agencies. The technology of electric, gas, or telephonic transmission is such as to require a close connection between the plant on the one hand and the consumers' homes or factories on the other. This is even true, though less rigidly so, for a railroad plant. Not all forms of transportation are so strictly localized - not ocean shipping, for example, nor truck transport. But for this very reason, these two forms of transportation have a less well established utility status." (Pages 12 and 13)

FEINER COMMENT: Natural monopoly is related to "the necessarily close connection between the utility plant on the one hand and the consumers' premises on the other." The telephone "public utility companies are essentially... transmission agencies" and do not justify monopolizing the customer equipment market any more than a railroad should monopolize the supply of track, cars, and engines, or an airline its planes, or a trucking company its trucks, or a shipping company its ships, as indeed, they do not.

Title: "COMPETITION IN THE MARKETPLACE"
 Author(s): Louis W. Stern
 John R. Grabner, Jr.
 Publisher: The Ohio State University
 Scott, Foresman and Company
 Date: 1970

SS-8

"The dangers of unregulated monopoly are obvious and provide the reasons why such market situations are usually closely regulated. Most of the monopolies in the United States today are so-called 'natural' monopolies, e.g., public utilities that supply local electric power, telephone, gas, or water services. The long-run pattern of their costs appear to make competition highly inefficient; therefore, monopoly is required (and regulated) by law. For example, it would be prohibitively expensive to have two or more electric plants and distribution systems in a given locale, all operating at less than optimal scale. The high fixed costs associated with the operation of most public utilities would result in higher costs and charges for the services provided if operating rates were substantially below capacity. Utilities must anticipate peak demand periods in their plant investments; thus, there is bound to be some excess capacity in their systems at off-peak times. If competitors were present, siphoning off some of the existing demand, the costs to consumers as a result of aggravated capacity problems would become intolerable, in the absence of large government subsidies. Thus, regulation is necessary to assure conduct which will not be substantially different from that which might be expected under competitive conditions." (Page 36)

FEINER COMMENT: This natural monopoly definition applies to the telephone network and could not conceivably apply to the customer equipment market.

Title: "PUBLIC UTILITY REGULATION"
 Author(s): William E. Mosher
 Finla G. Crawford
 Publisher: Harper & Brothers
 Date: 1933

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"Court decisions indicate that the case for public regulation is clearest in those utilities that enjoy a natural monopoly - that is, where there are natural limitations on the source of supply essential to that business, thus preventing effective competition. Thus it has been held that those who control the most advantageous watersheds have a natural monopoly in the water supply and that the state may compel the waterworks to supply all who apply to the full extent of its undertaking." (Page 7)

FEINER COMMENT: This definition could not conceivably apply to the customer equipment market.

"Geographical location of an activity may give to that activity the character of a natural monopoly . . . This factor is strikingly clear in those cases involving union stations, terminal facilities, and stockyards." (Page 8)

FEINER COMMENT: The analogy here would be telephone company central offices and not customer terminal equipment. .

"The character of the service may give to an enterprise monopoly advantage. Thus it has been held that if the product is such that it can have only a local distribution, the possibility of outside competition is remote and a factor of monopoly is present. For this reason the selling of gas and electricity is a public employment while the sale of oil lamps and candles for light, and oil and coal for heat is private. Oil, coal, lamps, and candles may be shipped in the channels of trade to compete in every market, whereas gas and electricity must come from one or a very few local companies." (Pages 8 and 9)

FEINER COMMENT: This is an excellent analogy - substitute "telephone network" for "gas and electricity" and "the sale of oil lamps and candles for light, and oil and coal for heat" with "the sale of customer telephone equipment."

"The common factor is virtual or potential monopoly, although it must be borne in mind that monopoly is a relative term and that in any given instance, elements of competition may be present. The existence of a virtual monopoly is therefore a matter of degree.

"Justice Brandeis as their spokesman delivered himself of the following sweeping generalizations:

'A public utility frequently has the status of a legal monopoly as well. Under our constitutional system only an industry or service which has the essential characteristics of a natural monopoly can be considered a legal monopoly. Legal monopoly itself is therefore not the test of public character.'" (Page 10)

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FEINER COMMENT: It follows, therefore, if the telephone utilities do not have a natural monopoly of the customer equipment market, they cannot have a legal monopoly.

" . . . I think . . . that the notion that a business is clothed with a public interest and has been devoted to the public use is little more than a fiction intended to beautify what is disagreeable to the sufferers." - Justice Holmes. (Page 12)

FEINER COMMENT: The foes of competition should take note of this old but timely observation.

Title: "THE AMERICAN ECONOMIC SYSTEM; REPRESENTATIVE SELECTIONS"
 Author(s): Edited by Massimo Salvadori
 Publisher: Bobbs-Merrill (New York)
 Date: 1963

SS-11

"Regulation. For some industries, it has long been recognized that enforcement of competition and prevention of monopoly are inappropriate approaches. For these industries, the technical efficiency achieved by allowing but a single, monopolistic firm to exist is great. Therefore, the monopoly is tolerated. Included among these industries are the public utilities. Some of these are also called natural monopolies. In general for these activities, the larger the firm and the fewer the number of competing firms, the less is the average cost of production and the smaller the social disadvantages. It is easy to see, for example, that five telephone companies in a city would be costly. There would have to be duplication of lines. In addition, a user might need to have five telephones to be assured of direct communication with any other city resident." (Page 157)

FEINER COMMENT: Once again, it is obvious that natural monopoly refers to the telephone network, and not to customer equipment. In fact, it is interesting to note if "a user might need to have five telephones to be assured of direct communication..." his right to own his own telephone equipment would improve his plight, because instead of five instruments provided by five telephone companies, which would be cumbersome and costly, he could purchase a single key instrument with five buttons.

Title: "PUBLIC UTILITIES: REGULATION, MANAGEMENT AND OWNERSHIP"
 Author(s): Martin T. Farris
 Roy J. Sampson
 Publisher: Houghton Mifflin Company (Boston)
 Date: 1973

SS-12

"Economists, lawyers, businessmen, and legislators have been arguing about what a monopoly is and is not for many decades.

"Insofar as monopoly does exist in the public utility field, it may be attributed either to 'natural' or 'artificial' causes. A natural monopoly is brought about by inherent factors in an industry or firm, such as economies of large-scale production, which may make it possible for one large firm to supply a market at a much lower cost (and price) than would be possible if several smaller firms undertook to supply an equivalent quantity of service. Natural monopolies also may arise from technical conditions, such as the possession of 'know-how' or the control of patents, and from site limitations (for example, sites where power dams can be located or natural gas found are fairly limited in number). The so-called artificial monopolies arise from legal barriers to the entry of competing firms, as by the granting of exclusive franchises, or by aggressive policies of public utility management officials who crush or buy out their competitors." (Page 19 and 20)

FEINER COMMENT: The telephone utilities have an artificial monopoly of the customer equipment market arising "from legal barriers to the entry of competing firms..." (such as tariffs and regulatory confrontations) "...and by aggressive policies of public utility management officials...." Once again, the above refers to the network and does not refer to the customer equipment market.

"Utilities traditionally have been organized in a monopoly form. While some authors say that this has come about because it is a 'natural' form for utilities to assume, others say that historical practices like the granting of franchises and limiting entry have encouraged this form.

"The term 'natural monopoly' suggests that most utility firms operate with a markedly decreasing cost function and have decreasing costs over a wide scale of operations. That is, in the first instance, per unit costs can be lowered considerably if a firm can operate near full capacity. Thus, either lower prices or higher profits can be derived from increases in production up to the limits of capacity. In the long run, economies of large scale seem available to most utilities. Hence, the larger the production unit, the lower the costs per unit of output and the lower the price or the higher the profit. Also, decreasing long-term costs for utilities result from technological progress over time. In all these instances most utilities are able to decrease costs per unit of production.

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"It is felt that society will be better served by a monopolistic type of organization if such an organization does indeed take advantage of these economies. This principle has long been recognized and has led to social preference for one utility in a given service area. It is further widely believed that utilities move 'naturally' toward a monopolistic type of structure if allowed to operate without social controls. This tendency has been recognized in the literature of economics for more than a century, although some object to the use of the term 'natural' to characterize this type of market structure." (Pages 155 and 156)

FEINER COMMENT: Again, this natural monopoly discussion relates to the network. And the telephone utilities did "move 'naturally' toward a monopolistic type of structure..." in that they were "allowed to operate without social controls." It is interesting to note that there is objection "to the use of the term 'natural' to characterize this type of market structure."

Title: "ECONOMICS OF PUBLIC UTILITIES"
 Author(s): Emery Troxel
 Publisher: Rinehart & Company (New York)
 Date: 1947

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"Natural Monopolies. Public authorities do not believe that competition of utility companies is a reliable means of price control. They believe that the managerial interests are likely to create monopolies in public utility markets. 'Natural' monopolies, they say, are common characteristics of utility industries. The term implies, of course, that the control of public utility service in a market is somehow 'naturally' or inherently monopolistic, that the rivalry between unregulated companies is inevitably eliminated, and one company ultimately dominates the market which several companies once occupied.

"Next, the word 'natural' is deceptive. Is monopolization a 'natural' condition for public utility industries, and an 'unnatural' condition for nonutility industries? What is 'unnatural' about the market control that two sulphur companies, for instance, exercise in this country? Since market prices can be controlled by nonutility firms as well as unregulated utility companies, the concept of a natural monopoly seems to be a fictional rather than a real characteristic of the utility industries. Perhaps, as others have observed, the notion of a natural monopoly was invented to justify exclusive markets for utility companies after their ineffectual and sometimes wasteful rivalry proved unsatisfactory to both the investor and the consumer interests." (Page 27)

FEINER COMMENT: "The notion of a natural monopoly" as being "invented to justify exclusive markets" is a timely observation. The notion is being re-invented today.

"The economies of large-scale plants in most utility industries lead to consolidations and mergers. Although they are evident in nearly all utility industries, these economies of large-scale operation are most common in the electric and gas industries. Some of these economies are related to technical operations of plants. As the capacity of an electric generating plant increases, investment and operating costs do not increase proportionately. Similar economies of large-scale output are available to gas companies. The average transmission and distribution costs of manufactured gas or natural gas decrease as the size of the pipe line increases. And all utility companies usually can realize other internal economies of size such as more specialization of the managerial and engineering staff, quantity purchases of materials, and a lower cost of capital.*

*These economies of size are not limitless. Except in metropolitan areas where suitable plant sites are sometimes scarce, there is actually a recent trend away from the larger types of electric generating

stations. A study by the Federal Power Commission roughly measures the limits of large-scale economies of electricity production. Managerial diseconomies, too, begin to show up in large, unwieldy companies. Becoming more inflexible in its administrative action and more infused with corporate bureaucracy as it grows, any company can experience significant diseconomies of large-scale production." (Page 29)

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FEINER COMMENT: Here it is seen that the concept of economies of scale is not sacrosanct, and while it applies to the telephone network, it certainly does not apply to the customer equipment market.

Title: "THE MODERN ECONOMY IN ACTION"
Author(s): Albert Alexander
Publisher: Pitman Publishing (New York)
Date: 1968

SS-16

"The American people have not only regarded monopoly as socially desirable in the public utility industries; they have also encouraged it by law under government regulation. Public utilities are regulated not merely because they provide an essential service (the food industry also supplies a basic necessity), but rather because the economies of scale are so obvious that monopoly structure is essential for economy and hence so is regulation. Public utilities, which include such essential public services as electricity, gas, and telephone systems, all forms of public transportation, and water supply companies, are considered natural monopolies because of both the function they perform and the nature of the business. It would be inconvenient as well as expensive to have two sets of electric power lines on the same street and two sets of telephone lines serving the same town. Consequently, the government grants private utility companies monopoly privileges in supplying certain services to the community but, as we have indicated, at the same time it regulates public utility companies' rates, service, business practices, and financial structures."

FEINER COMMENT: Here again the concept of economies of scale refer to structuring the telephone network, and does not bear on the customer equipment market. The discussion also revolves around "two sets of telephone lines" as it bears on natural monopolies. In no way can it be concluded that natural monopoly refers to the customer equipment market.

Title: "PUBLIC UTILITIES AND THE NATIONAL POWER POLICIES"
 Author(s): James C. Bonright
 Publisher: Columbia University Press (New York)
 Date: 1940

SS-17

"...public utilities are, to some extent at least, 'natural monopolies.'"
 (Page 5)

FEINER COMMENT: Obviously, to some extent public utilities are not natural monopolies; they are not as far as the customer equipment market is concerned.

"In the early days of the local utilities, such as the gas, the street railway, and the electric light companies, cities often made strenuous efforts to enforce competition by issuing franchises to two or more companies with the expectation that they would vie with each other in selling service within the same area. Almost without exception these efforts came to grief because of the technological nature of the business. The duplication of mains or wires in the same streets proved terribly wasteful; and the heavy overhead expenses of a public utility plant led to that suicidal type of rivalry called 'cut-throat competition.' In consequence, most of these competing enterprises were merged, with or without public approval, and the customer lost his chance to pit one electric company or one gas company against the other as a means of bargaining for the lowest possible rates."
 (Page 7)

FEINER COMMENT: This is the "forced" or "contrived" competition about which the telephone utilities have been speaking, erroneously cloaking this experience around the customer equipment market when it only bears on the network.

Title: "THE TELECOMMUNICATIONS INDUSTRY INTEGRATION VS. COMPETITION"
 Author(s): Manley R. Irwin
 Publisher: Praeger Publishers (New York)
 Date: 1971

SS-18

"If the natural monopoly premise has been challenged, certainly much of that challenge derives from the imperatives of technological change. Consider the content of communications service. Today computers are capable not only of processing data and information, but of switching record messages as well. Remote facsimile services are erupting into nationwide systems. Remote xerography services are carving out important submarkets. Remote batch and time-sharing services are experiencing phenomenal growth. One detects, in short, a segmentation process--a process that manifests itself not only in service but in terminals, loops, transmission, and switching facilities as well.

"In the terminal field, for example, new substitutes--including modems, multiplexors, concentrators, telephone sets, teleprinters, CRT display units--are almost a daily occurrence. The computer itself now functions as a remote outstation device. Indeed, some claim the television set has the potential of the ultimate terminal in the home, school, and university. This is not to say that the carriers have not introduced new generations of touch-tone handsets, picturephones, or teletype-writers. But these products no longer stand alone. The proliferation of competitive substitutes continues relentlessly.

"Nor are transmission facilities immune from this phenomenon of diversity. Cable television provides a broad-band link directly into the home, school, or business firm. Satellite transmission provides a substitute for toll trunking facilities, and carrier switching technology is constantly challenged by hardware produced by the computer industry. The carriers, in short, no longer possess the sole expertise in components fundamental to their facilities and network." (Page 37)

FEINER COMMENT: Even if there was any credence to the telephone companys' definition of natural monopoly as it sees it from its historical view, and I do not believe there is, would it still be valid in a modern world?

Title: "TECHNOLOGICAL CHANGE IN REGULATED INDUSTRIES"
 Author(s): William Capron
 Publisher: The Brookings Institution (Washington, D. C.)
 Date: 1971

SS-19

"Many of the regulated industries show significant economies of scale; that is, unit costs fall as the scale of production increases. They are also relatively capital intensive; that is, capital is a large proportion of total inputs. Indeed, the rationale for regulating a particular industry is often based on the fact that it has these two characteristics. In telephonic communications, and to a lesser extent in rail transportation, both characteristics are very pronounced. These industries are sometimes called natural monopolies, since their scale economies make competition inefficient for society as a whole. And in some of these industries, unregulated competition would lead to monopoly by a single firm simply because the largest firm can have the lowest costs and drive its rivals from the market." (Page 3)

FEINER COMMENT: Again, we have the economies of scale philosophy as underlying justification for a natural monopoly. It cannot pertain to the customer equipment market.

"The regulated industries tend to be 'high technology' industries. They have benefited from comparatively large investment in R&D - though, as will be noted below, most of the R&D affecting them is not undertaken by the regulated firms, except in the communications industry.

"Quite apart from any effect of regulation, it would appear that industries . . . - most clearly exemplified by telephone communications - could be expected to have a relatively high rate of increase in productivity and to have introduced many innovations." (Page 4)

FEINER COMMENT: The one regulated industry, the telephone industry, which was expected "to have introduced many innovations" failed to do so, and thereby encouraged competition.

Title: "OUR COMPETITIVE SYSTEM AND PUBLIC POLICY"
 Author(s): Thomas J. Anderson, Jr.
 Publisher: Southwestern Publishing Company
 Date: 1958

SS-20

"Chile possessed, by natural endowment, a near-monopoly of the world's supply of nitrate. On the other hand, public utility monopolies have developed commonly as a result of social action - the conferment of a monopoly by means of an exclusive franchise.

"The quality of service can be improved materially, under some conditions, when it is provided under a condition of unified, or monopoly, control. For example, when one enterprise provides telephone service to an entire community each user of the service can call, readily, all other users. Obviously this would not be possible if the community's telephone service were divided up among a number of firms which refused to cooperate in the establishment of interconnection facilities." (Pages 33 and 34)

FEINER COMMENT: Again, we have monopoly justification based upon network requirements, and in no way does this justify monopolizing the customer equipment market.

Title: "PRIVATE ENTERPRISE AND PUBLIC POLICY"
 Author(s): Melvin Anshen
 Francis D. Wormuth
 Publisher: The MacMillan Company (New York)
 Date: 1954

SS-21

"'Natural' Monopoly in the Power Industry . . . The important distinguishing feature of the power industry that created the circumstances in which some type of public regulation was held from the outset to be essential is the fact that competition in the generation and delivery of power would be prodigally wasteful and expensive. The problem can be put simply, yet dramatically, if we consider the costs of duplicate investment that would be involved in constructing parallel power facilities to serve consumers in a limited area such as a city." (Page 331)

FEINER COMMENT: Here we see the definition of natural monopoly once again defined in the terms of economies of scale.

"It is this quality of 'natural' monopoly in the power industry that created the need for regulation." (Page 332)

FEINER COMMENT: It follows that where the monopoly is not "natural," regulation may not be needed.

Title: "PUBLIC UTILITY ECONOMICS"
 Author(s): Paul J. Garfield, Ph.D.
 Wallace F. Lovejoy, Ph.D.
 Publisher: Prentice-Hall, Inc. (New Jersey)
 Date: 1964

SS-22

"NATURAL MONOPOLY

"The outstanding economic characteristic of public utilities is that they operate at greatest efficiency as monopolies. It has long been recognized that it is in the public interest to authorize only one public utility the exclusive right to supply one or more services to a particular market. Compelling economic and physical factors rule out all but the monopolistic form of market organization in the supply of local public utility services. As a result, public utilities are termed 'natural monopolies.' As such they are the outstanding exception to the generally competitive nature of our economy.

"The principle of natural monopoly was originally noted by John Stuart Mill, after London became the world's first city to have gas service. Writing in 1848, Mill observed that : (a) gas and water service in London could be supplied at lower cost if the duplication of facilities by competitive firms were avoided; and that (b) in such circumstances, competition was unstable and inevitably was replaced by monopoly."
 (Page 15)

FEINER COMMENT: Here we have the thoughts from John Stuart Mill that explain the evolution of natural monopoly as arising from the "duplication of facilities" in the gas and water business. Had telephones existed, no doubt he would have said "telephones." Nowhere is there any suggestion that natural monopoly could apply to the telephone customer equipment market.

"In the face of unstable and ruinous competition, the early public utilities found it far preferable to combine and to achieve thereby both monopoly control over prices and substantial operating economies in the form of lower costs. The latter point is the one which deserves special attention here. The dominant reason for the failure of competition to survive in the utility industry is the fact that utilities operate at or near lowest average cost, in supplying a particular market, when free from the competition of other sellers of the same service. Thus, utilities are inherently monopolistic. Viewed in this light, natural monopoly is both inevitable and desirable." (Page 16)

FEINER COMMENT: Again, the inherent natural monopoly characteristic of a utility revolves around economies of scale which pertains to operation of the network, and does not pertain to customer provided equipment.

SS-23

"Before considering further the economics of natural monopoly, it is important to observe that there are undeniable physical limitations which argue against allowing more than one supplier of each utility service to operate in any city. Electric and telephone company poles and underground conduits and cables occupy choice and strategic land sites in metropolitan areas and along our highways. Gas and water mains run under our streets. It is not hard to imagine the obstructions which would be presented by a duplication of utility company facilities - along and beneath our streets. Under regulated monopoly, only one supplier is authorized for each service. The same, of course, holds true for gas and water companies, which occasionally dig up city streets to repair or enlarge their mains. In light of the automobile traffic situation, it is apparent that more than one bus or streetcar line on a street is disadvantageous. Competition imposes another, special handicap on telephone companies. The value of their service is directly related to the number of telephones any subscriber can contact (without toll charge) through his own telephone. With more than one telephone utility, subscribers are faced with the dilemma of choosing between telephone service which will not reach everyone and subscribing for more than one telephone. Consequently, physical limitations alone indicate that public utilities are naturally monopolistic.

"In short, monopoly was recognized as 'natural' on the supply side of the market for public utility services.

"A chief cause of this may be found in the fact that the unit cost of supplying utility service is lower when monopoly exists than when competition is attempted. This factor provided a powerful motivation to the combination of would-be competitors into monopolies." (Pages 16 and 17)

FEINER COMMENT: Again, the natural monopoly concept embraces the network, and not customer provided equipment.

"Around the beginning of the present century, numerous state courts and commissions issued decisions which gave formal and official recognition to the economics of natural monopoly in the public utility industries. The general conclusion of these decisions was that monopoly, suitably regulated, was in the public interest. One of these decisions was written in 1908 by Commissioner Milo R. Maltbie, of the New York commission, in the Long Acre case.

"Turning to a consideration of the advantages of monopoly, Commissioner Maltbie cited, first, the avoidance of duplication of connection facilities and the public inconvenience related to such duplication. Second, he said that a single company would require less investment in total generating-plant capacity and substations than several companies serving the same market, because each of the nominally competing companies would have to install its own reserve capacity. Third, distribution losses are greater when there are several systems serving one market. As a result of the latter two factors, Commissioner Maltbie concluded, the cost of electricity is greater under competition than under efficient monopoly.

"A basic characteristic of a utility is that it is a heavy capital-using industry. This fact contributes to the 'natural monopoly' aspect of the industry. It is wasteful to duplicate large investments in plant and equipment if one set can get the job done." (Pages 18, 19 and 412)

FEINER COMMENT: Again, we have the economies of scale and duplication of the network arguments. They do not pertain to customer provided equipment.

SS-24

Title: "COMPETITION AND MONOPOLY IN TELECOMMUNICATIONS SERVICES"
 Author(s): William J. Baumol, Ph.D.
 Otto Eckstein, Ph.D.
 Alfred E. Kahn, Ph.D.
 Publisher: Reprinted by A.T. & T. Company
 Date: 1970

SS-25

FEINER COMMENT: A request was made to Alfred Kahn for a copy of the above publication. That request was made to him through the New York Public Service Commission where he has been recently appointed Chairman of the Commission. He graciously arranged that I receive the copy which was forwarded to me through Mr. Peter Manus, Director - Regulatory Research of AT&T. The publication was "Reprinted by AT&T Company." Attachment I is a page from that reprint.

"III. THE ROLE OF NATURAL MONOPOLY

"An industry is said to be a natural monopoly when it is characterized by economies of scale over the entire range of output that the market will take. In such an industry, with an appropriate type of regulation, the consumer may well receive goods and services at lower cost than he could under a competitive organization. Indeed, in such circumstances true competition is virtually impossible to achieve because the very presence of economies of scale makes it very difficult for small firms and new entrants to compete effectively and to survive. The abandonment of competition even in these instances will ordinarily involve a loss of some of its benefits that we have already summarized - notably a dilution of the external pressures to reduce price, improve service, and to increase the range and variety of services. But the costs of competition in terms of loss of the economies of scale and possible deterioration in the quality of service can exceed its benefits.

"The complexity of the evidence required to demonstrate the presence of economies of scale necessitates some further discussion. Economies of scale are not necessarily exhausted when some expansion of capacity merely replicates the company's existing equipment. In an industry in which several different alternative technologies are available - for example, voice frequency cable, microwave radio and coaxial cable in communications - there are likely to be considerable ranges of volume between that at which it pays to introduce one type of technology and that at which it is economical to switch to another. Volume may have to increase very substantially before it pays to introduce a coaxial cable with its attendant economies along a particular route. Economies are still available but they will be introduced only after demand has reached a certain level. The rate of introduction of new, larger-scale, lower cost technology may depend on the absolute growth of demand. The attainment of these economies can be delayed or prevented by the division of the industry's business among a number of competing firms.

"Whether economies of scale are so great as to outweigh the benefits of competition is an empirical issue. In some circumstances, full and free competition can determine whether new firms will be attracted into the industry and can achieve costs that permit them to prosper alongside the former monopoly. Such a test can, of course, be effective only if entry is not predicated on the expectation that the newcomer will be assured by regulation of a protected portion of the market if his costs turn out to be too high.

SS-26

"In communications, the advantages of natural monopoly seem to have extended beyond economies of scale, providing a stimulus to the sponsorship of basic research, particularly via the Bell Laboratories. Because the benefits are not diffused among a number of firms, the monopoly may invest more heavily in advancement of the basic technology than a number of smaller competitors would." (Pages 5 and 6)

FEINER COMMENT: Again, economies of scale is fundamental to a natural monopoly and could not apply to the customer equipment market. The last paragraph, however, observes that "the advantages of natural monopoly seem to have extended beyond economies of scale." If this is true, then justifying it by "sponsorship of basic research" is a weak argument, particularly because the "advancement of the basic technology" was not so responsive to customer needs that "smaller competitors" wouldn't do a job. In other words, only in that one area, basic research, where natural monopoly might be allowed to extend beyond economies of scale, AT&T "fell flat on its face" evidenced by the technological innovations of interconnect competitors.

"VII. CONCLUSION

"We believe that there is much to be said on grounds of social policy for the introduction of full competition where it is appropriate. Presumably, this would not hold for all regulated services but it may well be appropriate in certain selected areas. For some specialized services, new competitors may succeed and coexist with the 'natural monopolist' or even drive it from some segments of the market. Where they succeed, competitors will have demonstrated their inherent advantages and their presence will then clearly be desirable.

"We believe that either of two alternatives: maintenance of regulated monopoly or full competition in appropriate selected areas may represent a reasonable national policy choice. In some areas, it may be felt that competition is particularly appropriate because there it is likely to stimulate product innovation without a high cost in terms of economies of scale foregone. So long as full competition is permitted in these limited competitive areas, we see no inherent objections to such an arrangement.

"The only one of the available possibilities that society should certainly be unwilling to accept is the introduction of competitors along with the prevention of competition. This kind of government-enforced cartelization and division of markets can result in tremendous inefficiency and prove very costly to the body of consumers whose interests the Commission desires to protect." (Page 13)

SS-27

FEINER COMMENT: Even though in the employ of AT&T, professional integrity "will out." The first paragraph certainly would in no way foreclose the idea of competition in the customer equipment market, if indeed, this paragraph does not openly support it, as apparently does the second paragraph. The caveats would appear more applicable to specialized common carriers than competitors in the customer equipment market.

SS-28

This paper was prepared by a group of economic advisors at the request of The American Telephone and Telegraph Company. The group was asked to define certain economic issues associated with the changing regulatory scene.

The following is their statement:

Subject: Competition and Monopoly in Telecommunications Services

In our role as an economic advisory group to AT&T, we have on a number of occasions discussed the potential role of competition in communications.

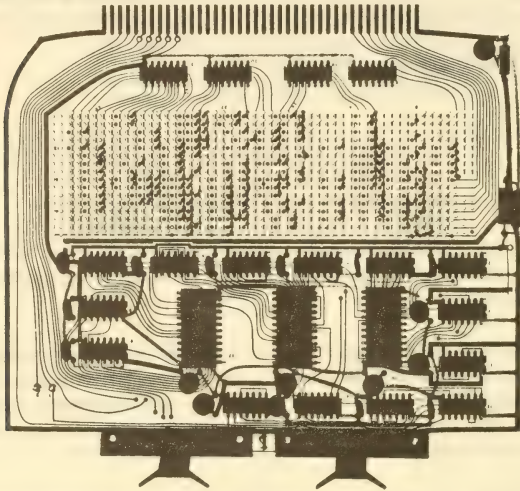
At the Company's request, we have prepared the attached memorandum describing our views on the basic issues. Current examination of policies in these areas makes it particularly timely to describe the fundamental economic principles that are relevant. It is in this spirit that we submit the memorandum for your use. We have no objection to your sharing it with the FCC.

The views expressed in the memorandum are strictly our own. The Company has not determined the contents of this report and we realize that it may not endorse all of the views expressed.

William J. Baumol
Otto Eckstein
Alfred E. Kahn

November 23, 1970
Attachment

The PHONEMASTER



The above is the printed circuit board which programs the PHONEMASTER 1010.

WHAT IS THE PHONEMASTER?

The Phonemaster is a sophisticated solid state restrictor that operates with KTS or PABX telephone systems.

- Restricts calls to selected prefixes within an area code.
- Allows calls to selected area codes.
- *Optional* SIX DIGIT PROGRAMMING allows calls to selected prefixes within selected area codes.
- Allows or restricts long distance information and toll free (800) calls while allowing or restricting other long distance calls.
- Eliminates unauthorized long distance calls.
- Programs Local trunks, FEX (extended calling areas) trunks, WATS lines and Tie lines to enforce their proper use.
- Changes built-in program by an *optional* PROGRAM CONTROL SWITCH.
- Provides traffic study information.

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PHONEMASTER 1000

The Phonemaster 1000 is a Long Distance Restrictor.

It can restrict dial '1' access, or limit calling to the local area code and allow long distance information and toll free (800) calling.

The Phonemaster 1000 can be provided with an *optional* PROGRAM CONTROL SWITCH to lift restriction for placement of authorized long distance calls.

PHONEMASTER 1010

The Phonemaster 1010 provides all the capabilities of the Phonemaster 1000.

In addition it can restrict calls to selected prefixes within an area code.

Programming can be changed with an *optional* PROGRAM CONTROL SWITCH to "shut down" or "open up" selected prefixes or area codes.

PHONEMASTER 1040

The Phonemaster 1040 provides all the capabilities of the Phonemaster 1010. In addition, the Phonemaster 1040 will perform the work of several Phonemaster 1010s in programming different trunk groups, such as Local trunks, FEX (extended calling area trunks), WATS lines and Tie lines to enforce proper use.

The Phonemaster 1040 has *optional* SIX DIGIT PROGRAMMING capability, within system constraints. For example, calls to specified prefixes within specified area codes can be allowed or restricted, or six (of seven) digit numbers within a local area code can be allowed or restricted.

THE PHONEMASTER	1000	1010	1040
Allows or Restricts Dial "1" Access	*	*	*
Allows or Restricts Direct Dialed Long Distance Calls	*	*	*
Allows or Restricts calls to the Telephone Company Operator ("O")	*	*	*
Allows or Restricts Long Distance Information calls	*	*	*
Allows or Restricts Toll Free (800) Calls	*	*	*
Allows or Restricts Special Service Codes	*	*	*
Provides <i>optional</i> PROGRAM CONTROL SWITCH	*	*	*
Provides Traffic Study Information	*	*	*
Restricts calls to selected prefixes within an area code		*	*
Provides multiple programs for multiple trunk groups			*
Provides <i>optional</i> SIX DIGIT PROGRAMMING			*

CHARACTERISTICS of the PHONEMASTER

TT-3

- OPERATION When an incorrect call is attempted, the call is restricted and diverted to an audible signal. The operation is automatic. No operators or additional personnel are required.
 - INSTALLATION It is wall-mounted in the telephone equipment room or common equipment point. It is connected on the telephone company central office side of the outgoing trunk equipment on the customer's premises.
 - COMPATIBILITY It is compatible with both KTS and PABX telephone systems.
 - SKILLS The employees need to learn no new skills or procedures.
 - SERVICE No routine service is required.
 - POWER No special power source is required beyond the utility 110v outlet which is required within six feet of the PHONEMASTER. There is no meaningful increase in the electric bill.
 - EXPANSION Additional equipment can be added with relative ease.
 - DESIGN The PHONEMASTER is a sophisticated solid state electronic device of advanced design.
 - SIZE & WEIGHT A 16 trunk system is less than 2 cubic feet in size and is approximately 30 pounds in weight.
-

WARRANTY

The PHONEMASTER warranty is guaranteed to be free of defective material and/or faulty workmanship for a period of one year from date of delivery.

During the guarantee period defective parts will be replaced at the expense of Phonetele, Inc.

Phonetele, Inc. shall not be liable for injury to property or persons other than the Phonetele equipment itself.

Part replacements resulting from accident or abuse are excluded from this warranty.

Modifications, attachments, repairs or changes made by the Purchaser and not recommended or approved by Phonetele, Inc. void this warranty.

There are no warranties express or implied except those set forth herein.

TT-4

GLOSSARY

- DIAL "1" ACCESS In some areas it is necessary for the caller to dial the number '1' before making a toll call.
- FEX Foreign EXchange trunks, or trunks to extended calling areas.
- KTS Key Telephone System
- OUTGOING TRUNK A trunk which is used only for making outgoing telephone calls.
- PABX Private Automatic Branch EXchange, i.e., a "switch-board".
- PREFIX The first three digits of a seven digit telephone number.
- PROGRAM(S) A composite of all of the allowed or restricted calling on a particular trunk group(s) as it is engineered and built into the PHONEMASTER.
- PROGRAM CONTROL SWITCH Allows a built-in program(s) to be changed to an alternate built-in program by a switch arrangement.
- RESTRICTOR A unit of equipment (the PHONEMASTER) for insertion on outgoing trunks which restricts calls to forbidden codes.
- SIX DIGIT PROGRAMMING The ability to selectively allow or restrict calls on the basis of the first six digits dialed.
- SPECIAL SERVICE CODES These codes include local information, local telephone repair, etc.
- TOLL FREE (800) A telephone number which allows free long distance calling to the calling party.
- TRAFFIC STUDY Visual traffic analysis indicates whether there are too many or too few trunks.
- TRUNK (LINE) One telephone communication channel, like an individual home telephone.
- TRUNK GROUP A collection of individual trunks by type (FEX trunks, WATS lines, and Tie lines).
- WATS TRUNKS Wide Area Telephone Service.

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PHONE TELE

Phonetele, Inc., 15414 Cabrillo Road, Van Nuys, Calif. 91406 • (213) 988-5470

EXHIBIT 2.—*History of Rice International Corp. Difficulty in Marketing Product
Because of Inability in Obtaining Interface Devices*

RICE INTERNATIONAL CORP.,
Miami, Fla., March 29, 1974.

MR. GERALD HELLERMAN,
Senate Antitrust and Monopoly Subcommittee,
Washington, D.C.

GOOD MORNING, MR. HELLERMAN * * * and, thank you for your telephone call yesterday morning.

I have enclosed a red bound book, giving you the entire history of the plight of Rice International in it's dealings with AT&T, The Bell System, The FCC, and State of Florida Public Service Commission and others.

Our correspondence with AT&T and Bell starts back in August of 1970, almost four years ago . . . and we bring your office right up-to-date with our last answer, dated today.

I have also enclosed several brochures explaining the functions and purposes of the Rice MULTI-PHONE.

You may be interested in the fact that our MULTI-PHONE has just received Underwriters' Laboratory Approval. It is our belief that ours is the only telephone in the world with this seal of approval.

We are truly proud of our product . . . with all circuitry built *inside* the telephone instrument. Our circuitry is patented, is all solid-state and assembled under the latest state-of-the-art.

Thank you, Mr. Hellerman . . . if you require additional information, please do not hesitate to contact us. Our representative, Fritz Gibson, Jr., will be available to appear before your committee when called upon.

Most sincerely,

CHARLES F. RICE,
President.

Enclosures.

CONFERENCE PHONE & CALL REROUTER OPERATING INSTRUCTIONS

AS REROUTER PHONE

1. Incoming call is put on hold, by pushing Button—Line One or Line Two, depending on which line incoming call is on.
2. "Secretary" then dials called Party, **wherever** he can be reached by phone. Upon reaching party, she pushes button for 2nd line. This connects calling and called parties. The "Secretary" may hang up, leaving both parties connected. (Supervisory Lamps are on.)
3. When parties complete call and hang up, Supervisory Lights go out and all lines disconnect automatically, leaving lines free for other calls.
4. NOTE: If calling party hangs up, called party is still connected to his office (indicated by "Bright" Supervisory Light) and "Secretary" can come back on phone for instructions, or vice versa.
5. "Secretary" and "Executive" may hang up when instructions are completed. Lines disconnect automatically.

AS CONFERENCE PHONE

1. Dial out on Line One...after party answers, push button, Line One, putting on Hold.
2. Switch to Line Two. Dial...after party answers, push button, Line Two. (This automatically seizes line, putting called parties on Conference Connection.)
3. Should the originator of the Conference call not wish to participate in the Conference, he simply hangs up his phone, leaving called parties talking—while Supervisory Lamps remain illuminated, indicating Conference.
4. The originator, at his option, may lift the receiver in the Conference at any time thereafter to participate.

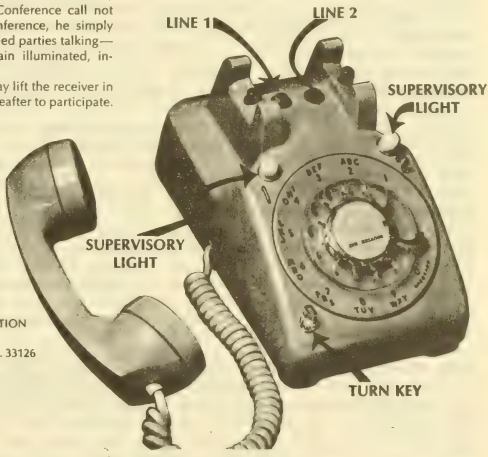
5. When parties have completed Conference, Supervisory Lights go out, indicating Automatic Disconnect.
6. NOTE: The originator may at any time disconnect Line One or Line Two from Conference by depressing **Turn Key** (having first switched to Line to be disconnected).

AS REROUTER WITH WATS LINE

1. Office receives call, secretary answers, pushes button—putting call on hold.
2. She switches to Wats Line, dials party. After party answers, pushes button connected with Wats Line. This automatically connects calling party with called party.
3. Secretary hangs up phone, Supervisory Lamps, Lines One and Two remain illuminated, indicating lines are in use.
4. When parties have completed their calls (hanging up phones), Supervisory Lamps go out, indicating Automatic Disconnect.
5. NOTE: If either calling or called party wishes secretary to come back on line after the other hangs up, he remains on the phone. The Supervisory Lamp stays on, signaling her to lift receiver.
6. When calls are completed, rerouter phone automatically disconnects, freeing lines for other calls.



RICE INTERNATIONAL CORPORATION
ELECTRONICS
1260 N.W. 57th AVE. • MIAMI, FLA. 33126
PHONE (305) 665-6525



RICE INTERNATIONAL CORP.,
Miami, Fla., November 16, 1972.

MR. SAMUEL GORDON,
Assistant Chief of Special Trial Section,
Department of Justice,
Washington, D.C.

DEAR MR. GORDON: First let me thank you for the time and courtesy shown us at our conference in your office Thursday, November 2, 1972.

At the close of our meeting you asked that we present to your office copies of any documents substantiating our claim that A.T.&T. and the Bell System have gone far beyond any "reasonable time" in providing Rice International Corp. with an interconnection device for the Rice Multiphone.

Rice International Corporation, a Florida corporation, incorporated June 15, 1970, seeks to provide for the telephone subscribers throughout the world several services which are presently unavailable in the telecommunications market.

On August 8, 1970, at the suggestion of Mr. Brian Cosgrove, Southern Bell, Miami, we wrote to A.T.&T. in New York City, outlining the functions of the Rice Multiphone and asking their opinion and interest, if any, in the instrument. (Exhibit No. 1).

After much correspondence which continued through January, 1971, we determined that A.T.&T. was not at that time interested in making available to the subscriber the services that could be provided by the Rice Multiphone. Following this, a *verbal* request was made to A.T.&T. that we be provided with an interface for our instrument as provided for by the then existing tariff regulations. Let me point out that these negotiations were verbal and the first documentation of this is in the enclosed letter dated May 4, 1971 addressed to Mr. Ken Johnson, of Southern Bell, Miami. Please note Paragraph 2 of this letter. This substantiates that a request had been made some time prior to this date, since, as indicated, an interface was to be installed in our corporate offices in Miami that week. (May 4, 1971) (Exhibit No. 11).

To further substantiate this date see enclosed letter dated May 4, 1971 addressed to Mr. Robert B. Brunson, Jr., Assistant Engineering Manager of A.T.&T. in New York. This letter refers to a very cordial meeting with Mr. Brunson in New York, in which I and our chief engineer, Eddie Currie, were assured that an interface for the Rice Multiphone was forthcoming. (Exhibit No. 12).

From May, 1971 to May, 1972 we carried out voluminous correspondence with A.T.&T. and Southern Bell, all to no avail as no interface was forthcoming. During this period we were assured, verbally, that A.T.&T. had evaluated our instrument, that it had passed A.T.&T. engineering tests, and was referred to Mr. Herman Goodrich, Marketing Supervisor of A.T.&T. for a marketing study. Also in October, 1971, Mr. Bob Rivenes of A.T.&T. New York Engineering staff visited in our office at the request of Southern Bell's Miami Manager. (See Item 4 of the letter dated June 3, 1972 addressed to Mr. Bernard Strassburg, Chief of Common Carrier Bureau of the Federal Communications Comm., Washington, D.C. (See Exhibit No. 20).

Commissioner Robert E. Lee of the F.C.C. was first introduced to our problem on February 2, 1972. Commissioner Lee referred us to Louis Feldner, the Vice Chairman of the P.B.X. Advisory Committee on February 10, 1972.

On Wednesday, November 1, 1972, Richard Putman, Executive Vice President of Rice International, and I, met in Washington, D.C. with Mr. Paul Darling, Mr. Tom Elean, and Mr. Dave Cosson of the F.C.C. They arranged an appointment with Mr. Arthur Woods, Assistant to Mr. Robert Pitofski, Bureau Chief of the Federal Trade Commission. Mr. Woods, in turn arranged our appointment with your office. Later that same day, we again talked with the F.C.C. and they informed us that they had a very specific reason for sending us to the F.T.C. They said that Mr. Darling's office wanted us to make a personal appearance to present our problem to the F.T.C. and that they, Mr. Darling's staff, would be sending an interdepartmental communique to the F.T.C. citing the specific tariffs which, in their opinion, A.T.&T. is violating.

Enclosed please find copies of correspondence of Rice International with A.T.&T., Southern Bell, the F.C.C. and the Florida Public Service Commission. I believe this firmly establishes our claim of discrimination and re-

straint of trade by A.T.&T.'s refusal to provide us with the required interface.

In closing, Mr. Gordon, may I make a plea for relief from the untenable situation in which we, Rice International, find ourselves. We were originally promised that an interface device would be installed on May 6, 1971 (See Exhibit No. 11). As recently as November 9, 1972, eighteen months since the original installation was promised, we are being advised by the Bell System that our equipment cannot be used until a connecting arrangement can be worked out. (See Exhibit No. 31).

I am certain that you will appreciate the gravity of the situation which Rice International Corporation is experiencing and that this series of interminable delays has resulted in the depletion of the existing funds which were to launch our corporation into a national marketing program. The failure of A.T.&T. and the Bell System to meet their explicit commitments as stated in the related tariffs and documented by their letters to us some eighteen months earlier has placed us on the brink of financial disaster.

We have a highly marketable telecommunication instrument which would provide to the subscriber services which are not now available. We have tried for over two years to work with the telecommunications industry, but cannot market our product because of the refusal of A.T.&T. and the Bell System to provide us with an interface which the existing tariffs say they *must* provide.

Finally, we note that on Tuesday, November 7, 1972, the Attorney General of the United States, Richard Kleindienst, was interviewed on C.B.S. Following questioning concerning the Watergate incident and the Republican campaign fund investigations, he made the following statement:

"If anyone presents the Justice Department with credible evidence of violations of federal law, we will investigate and upon substantiation of the evidence we will prosecute. No one is immune. This is a unique feature of our governmental system and without this we can have no faith in our system."

There can be no doubt, on the basis of the accompanying documentation that there exists credible evidence of violations of Federal law and we know that upon substantiation of our claims that we may look to the Justice Department for assistance against a most formidable adversary who has denied us the opportunity to compete fairly and openly in the telecommunications marketplace for what will shortly be a period of over two years.

There can be no more classic example of restraint of trade than that to which Rice International Corporation has been subjected at the hands of A.T.&T. and the Bell Systems.

Respectfully,

CHARLES F. RICE,
President, Rice International.

Exhibit 1

AUGUST 3, 1970.

ENGINEERS, DIRECTORS AND CUSTOMERS
*Telephone System,
American Telephone & Telegraph,
New York City*

GENTLEMEN: At the suggestion of Mr. Cosgrove Brian, Southern Bell, Miami, we take this opportunity to briefly acquaint you with the *patented, solid state circuit, RICE CONFERENCE PHONE & CALL REROUTER.*

Our device, unlike some of the others to which you may have been exposed is:

Patented.

Solid State Circuit.

Compatible with *all* telephone company's switching & signaling equipment.

has:

an *automatic* disconnect feature.

freedom from maintenance.

been field tested for over four years . . . in Model 510 Telephones.

We would welcome the opportunity to demonstrate our device and provide any additional information you may desire.

We are interested in your opinion and would like your evaluation, as we are now preparing our marketing program.

Thank you, very much, for your early attention to this matter.

Sincerely,

CHARLES F. RICE,
President.

Enclosure.

Exhibit 2

AMERICAN TELEPHONE & TELEGRAPH,

August, 25, 1970.

Mr. CHARLES F. RICE,
*President, Rice International Corp.,
Electronics,
Miami, Fla.*

DEAR MR. RICE: Thank you for your letter of August 8 submitting for our consideration United States patent No. 3,476,322 on "Combination Conference Connection and Call Transfer Device for Telephone Subscriber Lines," which was granted to you and to Mr. Charles Kintantas on September 30, 1969.

As you were informed in a recent telephone conversation with Mr. W. J. Bischoff of my organization, we are arranging for a technical evaluation of the submitted patent and will let you know, upon completion of our study, where it contains anything of interest to the Bell System. If, after consideration of the patent, it should appear that demonstration would be desirable, we would be pleased to take advantage of your kind offer.

In the meantime, your interest in writing is appreciated.

Sincerely,

F. K. WURST,
Engineering Manager.

Exhibit 3

RICE INTERNATIONAL CORP.,
Miami, Fla., August 28, 1970.

Mr. F. K. WURST,
*Engineering Manager, A.T.&T.,
New York, N.Y.*

DEAR MR. WURST: Thank you for your letter of August 25th, 1970, concerning our "Combination Conference Connection & Call Transfer Device" ... U.S. Patent Number 3,470,322.

We are pleased to learn that you are arranging for a technical evaluation and study to determine if the device contains features which might be of interest to the Bell System.

As mentioned in our letter of August 8th, we are presently negotiating a marketing program in the U.S. and abroad. And, your early decision would be most appreciated.

Sincerely,

CHARLES F. RICE,
President.

Exhibit 4

AMERICAN TELEPHONE & TELEGRAPH CO.,
New York, N.Y., October 1, 1970.

Mr. CHARLES F. RICE,
*President, Rice International Corp., Electronics,
Miami, Fla.*

DEAR MR. RICE: This is in further reference to your letter of August 8 concerning United States patent No. 3,470,322 on "Combination Conference Connection and Call Transfer Device for Telephone Subscriber Lines" which issued to you and to Mr. Charles Kintantas. We also have your letter of August 28.

We have completed our study of the submitted patent and have reached the conclusion that it does not contain any novel features which are of present Bell System interest or which are likely to become of interest in the future. We do not feel warranted, therefore, in seeking to acquire rights thereto.

Despite the adverse nature of this reply, I want to thank you for giving us the opportunity to consider your patent. Your interest in the telephone business is very much appreciated.

Sincerely,

F. K. WURST,
Engineering Manager—Suggestions Studies.

Exhibit 5

OCTOBER 5, 1970.

Mr. F. K. WURST,
*Engineering Manager, American Telephone & Telegraph Co.,
New York, N.Y.*

DEAR MR. WURST: Thank you for your letter of October 1st . . . concerning the Rice patent number 3,470,322 on our combination conference and call transfer device.

I must admit that your letter didn't say what I wanted to hear. But, in all honesty we did not expect you to offer us "seven hundred million dollars" either. And, while you're in no way required to do so, you didn't tell me WHY you reached the conclusion that, "it does not contain any novel features which are of present Bell System interest". If you could take the time, as part of your evaluation, I would certainly appreciate a more detailed explanation, Mr. Wurst.

We did not send an instrument to you for testing. Had you had one, it's possible that you *might* have reached a different conclusion.

I realize that you can draw certain conclusions from what we sent to you but, as the old saying goes, there's nothing that sells the steak, like the sizzle. And, we had the sizzle here in Miami.

The Bell System is the only company that we've shown our device to who has replied in this manner . . . everyone else has shown a great degree of interest.

We now have patents—in hand—from the U.S., Canada, Great Britain and West Germany. We expect our Japanese patents within the next 30 days. To me, this makes our device "novel".

Please don't misunderstand the tone of my letter . . . we do appreciate, very much, the effort expended on our behalf.

We would like to call on your good offices just one more time for the reasons behind your conclusions.

Mr. Wurst, we *do* thank you very much.

Sincerely,

CHARLES F. RICE,
President.

Exhibit 6

AMERICAN TELEPHONE & TELEGRAPH CO.,
New York, N.Y., October 19, 1970.

Mr. CHARLES F. RICE,
*President, Rice International Corp., Electronics,
Miami, Fla.*

DEAR MR. RICE: This is in response to your letter of October 5, 1970 requesting additional information as to the reasons for reaching the conclusion expressed in our letter of October 1, 1970 and your comment regarding the possibility that we might have reached a different conclusion if we had tested one of your instruments.

As I am sure you can appreciate, an idea to be of value to us must be useful in our operations and not already known to us or to the general public. While we do not undertake to detail for submitters our reasons for not adopting their ideas, you may be interested in knowing, or may already be aware, that for many years, Bell companies have offered an "add-on" service on key telephone sets which provides a service similar to that of your instrument. Early in the development of this feature, models which permitted the connection between the two lines to remain established after the handset had been returned to its cradle were considered, but it was decided that it would be advisable to maintain the connection only as long as the handset is off hook. However, a number of other arrangements for providing call transfer and conferencing have been developed for other applications. In a number of mechanical and electronic PBX's, a call transfer option, including the conferencing feature, is being offered. Whether or not we might eventually provide such a service on other

systems will not depend solely on their technical feasibility. The cost of providing them, the extent of customer demand, transmission considerations and tariff problems are also factors to be considered.

You indicated that you felt that our conclusion might have been different if you had sent an instrument to us for testing. While the information you have submitted previously does not tend to support this, I can assure you, we are always willing to receive ideas which are intended to improve our services. I am enclosing for your information a printed statement which explains the "ground rules" we follow in handling such submittals and contains other information in which you might be interested. If you should send us an instrument or additional material for our consideration, we'll assume you have done so in accordance with these "ground rules." We have found over the years that this procedure helps to avoid misunderstanding and unnecessary delay.

Thank you for writing and giving us this opportunity to explain further our policy in handling such matters.

Sincerely,

F. K. WURST,
Engineering Manager—Suggestions Studies.

Enclosed: Form E-5413.

Exhibit 7

JANUARY 16, 1971.

Mr. W. J. RINKOR,
Marketing and Service Plans,
New York, N.Y.

DEAR MR. RINKOR: Back in August of 1970, we started a chain of correspondence and telephone calls with A.T.&T.'s engineering manager, Mr. F. K. Wurst.

We've received letters from Mr. Wurst dated 8-25-70, 10-1-70, and 10-19-70, concerning our patented RICE CONFERENCE PHONE AND CALL RE-ROUTER (brochure enclosed).

Mr. Wurst mentions an "add-on" service (offered by A.T.&T.) "similar to" that of our instrument. You do have a similar "intercom" add-on service, but your device does not permit "outercom." Mr. Wurst, in his letter of 10-1-70, says: "It (the Rice phone) does not contain any novel features which are of present Bell System interest or which are likely to become of interest in the future."

Mr. Rinkor, my next statement *is not* meant to be critical of Mr. Wurst and I *do not* mean to be rude. But, Mr. Wurst has obviously not given our device a thorough evaluation. For if he had, he would have found that our patents have been issued because our device is novel. Our circuitry permits us to do things in telephone communications that *no one* else has been able to do.

Several independent telephone companies (2 in North Carolina, 2 in Florida, 2 in the Midwest, and 3 in Georgia) have placed orders for our device and are applying for tariffs with their respective Public Utilities Commissions.

Exhibit 8

Mr. Cosgrove Brian, Southern Bell's District Marketing Manager, here in Miami, has suggested that I write to you. And, we've learned through experience (in dealing with the above companies) that we should originate our contacts with Marketing, rather than with Engineering . . . another reason for now writing to you.

Mr. Rinkor, thank you! We are available to go into detail on the merits of our device . . . to put one in your hands for tests and evaluation, from a marketing standpoint.

I shall look forward to hearing from you.

Sincerely,

CHARLES F. RICE, *President.*

Enclosure.

Exhibit 9

JANUARY 25, 1971.

Mr. C. E. RICE,
Rice International Corp.
Miami, Fla.

DEAR MR. RICE: This is in reference to your letter of January 16, 1971 regarding the Rice Conference Phone and Call Rerouter.

The replies you have received from F. K. Wurst of our Engineering organization are consistent with the position Marketing takes in regard to the Rice Conference Phone and Call Rerouter. Although Engineering has responsibilities

for evaluating and transmitting Company position on requests such as yours. Mr. Wurst consults freely Marketing in the examination of specific products or services.

Approximately a year ago we extended "Add-On" service to cover all incoming or out-going calls where the line and set are equipped for this capability. Prior to this "Add-On" was confined to behind PBX type applications. Although your device has certain unique aspects, it does not in our opinion offer significantly attractive features to warrant our consideration as a possible standard Bell System offering.

If you have any further questions regarding this matter please feel free to contact us.

Sincerely,

W. J. RINKOR,
Marketing Director.

Exhibit 10

JANUARY 28, 1971.

Mr. KEN JOHNSON,
Southern Bell Telephone Co.
Miami, Fla.

DEAR MR JOHNSON: As promised, in our recent telephone conversation, I'm sending you a photo-copy of Mr. W. J. Rinkor's letter to me. I'm also taking a liberty and sending you photocopies of our correspondence with your Mr. F. K. Wurst.

Without appearing to be disrespectful, I must say that I just don't understand your New York people. Maybe they don't understand me. But, our device has an entirely different application from that of your "Add-on" service . . . as we understand this particular AT&T, in-coming and out-going feature.

Even Mr. Rinkor admits that your "Add-on" service works only "where the line and set are equipped for this capability." Our device is universal . . . it requires no special additions . . . it disconnects automatically . . . it works with *all* types of switching and signaling equipment. And, conservatively, there's a market of over 40 million telephones just within Bell's and AT&T's marketing areas alone. I don't have to tell you, that's one whale of a market.

Mr. Johnson, may I take this opportunity to thank you for the continuing interest in our device. It's been shown many times by you and by other members of Southern Bell Marketing, here in Miami . . . we appreciate it!

Most Sincerely,

CHARLES F. RICE, *President.*

Enclosures.

Exhibit 11

MAY 4, 1971.

Mr. KEN JOHNSON,
Southern Bell,
Miami, Fla.

DEAR KEN: I should have written sooner. But, I've been pretty busy. However, I did want to thank you for your help and your interest in the Rice Conference and Call Rerouting Telephone.

I'm looking forward to having your interface device installed on Thursday of this week.

I wrote, earlier today, to your Mr. Robert Brunson, Jr., Assistant Engineering Manager—Voice Connecting Arrangements at AT & T, in New York. I wanted to send him my late but sincere thanks for his help, while Eddie Currie and I were in New York last month.

I enjoyed our luncheon meeting the other day and just wanted to take this opportunity to thank you again and to assure you, once again, that we will cooperate with you and your office in any way that we can.

My best wishes to you.

Sincerely,

CHARLES F. RICE, *President.*

Exhibit 12

MAY 4, 1971.

Mr. ROBERT B. BRUNSON, Jr.,
Ass't. Engineering Manager,
American Telephone & Telegraph Co.,
New York, N.Y.

DEAR MR. BRUNSON: A late but sincere "thank you" for your time and hospitality when Eddie Currie and I were in New York last month . . . we appre-

ciate your interest in us and your help with your Company in securing an interface device for our Rice Conference Phone & Call Rerouter.

At your suggestion, we contacted Southern Bell here in Miami and met with Mr. Ken Johnson. Mr. Johnson has also been most helpful.

To bring you up to date, Mr. Johnson says that we'll have an interface device installed in our office by no later than Thursday, May 6th, 1971. We're looking forward to your continuing co-operation and want to assure you that you most certainly have ours.

We feel that our device will offer definite advantages to our mutual users and that our device will also go a long way toward increasing revenues through increased usage of your long lines . . . through the adding of lines by your subscribers, etc.

Mr. Brunson, my thanks to you again. On your next trip to Miami, I hope that you'll favor us with a telephone call and a visit to our offices if there's time.

Sincerely,

CHARLES F. RICE, *President.*

Exhibit 13

DECEMBER 4, 1971.

Mr. F. K. WURST,
*Engineering Manager—Suggestions Studies, AT&T,
American Telephone & Telegraph Co.,
New York, N.Y.*

DEAR MR. WURST: We have not corresponded since your last letter to us, dated October 19th, 1970. It's been a long time. But, much has happened in the interim. We've improved our solid state circuitry and we've reduced the cost of manufacturing our circuitry and supervisory light system. We are now in MASS PRODUCTION, no longer making and demonstrating with PROTO-TYPES.

In addition and at a slight increase in cost, we can now supply the user with an intercom system. By using the dial or the touch-tone buttons, you may dial up to ten persons and each will receive a different, selective tone, indicating that he's to pick up the phone at this station, for his message. This is accomplished without tying up lines used for incoming calls.

You already know the cost of telephone instruments from Western Electric and other suppliers. Add to that cost the cost of our circuitry and lighting system (approximately \$40.00, including components and labor) and you have the total cost of manufacturing our circuitry. To the above figures, we would add a profit for our Company.

There is definitely a customer demand. TELEPHONY magazine gave us a complimentary "plug" in their October 25th, 1971, "New Products" section. And, we've already received over 200 inquiries . . . some from Bell System Executives around the Country. Other complimentary promotional pieces will be published in the forthcoming issues of all the major "trade" publications.

Given the opportunity, we believe that we can prove to you that the use of our device can definitely increase revenues for AT&T and it's Subsidiaries. This can be done thru the subscriber's adding additional lines . . . thru the increased use of long distance lines, because of the CONVENIENCE of the subscriber placing his own conference calls.

As you know, our Rice Conference and Call Rerouting Telephone is Patented in the United States, Great Britain, Canada, West Germany and Japan. We have Patents Pending in Australia and other European and Asiatic Countries. We have applied for our NEW intercom feature, mentioned earlier in the body of this letter.

As you also know, Mr. Bob Rivenes has been down to see us. We met with him and several of your local Engineering and Marketing personnel, to discuss and hopefully work out a solution to the problem we face on your requirement for an interface device. We believe that we now have the solution at hand and that such an interface will be available to us in the next several weeks.

We are aware that for years, you've provided an "add-on" service only slightly similar to ours. Unlike ours, you have no automatic disconnect feature . . . your device must time itself out. And, as you also know this sometimes takes "awhile". Ours disconnects automatically, immediately. Your device works only with key system equipment . . . ours is universal and works with all types of switching and signaling equipment. We are also aware of the fact that you can provide this service in your more modern PBX's. But, Mr. Wurst, we want the opportunity to convince you that you can't do it, either in PBX's or single telephone instruments, as efficiently or as economically as our circuitry would permit you

to do it. Please don't misunderstand me . . . I'm not knocking what you have. I'm only trying to tell you that we can save you money and improve the service that you now offer your customers, through the use of our circuitry.

As I believe I've said to you before . . . our instrument is a miniature switch-board. It can do many more things than those which we're selling right now. I'm sure that you and your engineers have discovered this fact.

In previous correspondence, I had mailed copies of our U.S. Patents without the light circuit. I have now enclosed a copy of our amended Patents giving you additional data, including our Supervisory Lamp System. (Patent #3,567,-867)

To make a long, long story short . . . w'd appreciate your reviewing all the facts concerning the feasibility of our device being purchased for use by AT&T and or one of its Subsidiaries.

As I said at the outset, we're now manufacturing and marketing our device . . . we want to CONTINUE to co-operate with the telephone companies. We do not want to be forced to sell "outside" the Industry.

Mr. Wurst, it seems like everytime I write to you I wind up apologizing for the length of my letters. I must do so again but, hope that you'll understand that there's much to be said and much to be accomplished by our working toward a mutual goal.

Somewhere along the line I must have been a pretty poor salesman because I haven't been able to convince you that what's good for Rice International is GOOD for AT&T and the Bell System. . . . I have yet to talk with one of your Bell Marketing men who wouldn't like to have this service to sell to his subscribers.

I realize that there are problems involved. But, I know that they can be solved.

Thank you again, Mr. Wurst. . . .

Most sincerely,

CHARLES F. RICE, *President.*

Enclosures (3).

Exhibit 14

AMERICAN TELEPHONE & TELEGRAPH Co.,
Denver, Colo., February 14, 1972.

Mr. CHARLES F. RICE,
President, Rice International Corp.
Miami, Fla.

DEAR MR. RICE: Because my organization is responsible for key telephone system conferencing arrangements, your letter of December 4, 1971 to Mr. F. K. Wurst concerning the Rice Conference and Call Rerouting Telephone has been referred to me for reply.

We have carefully reviewed the operation of your conferencing telephone and, on the basis of this evaluation, have concluded that the service is not one which we believe would warrant standardization for general use in the Bell System.

Thank you for giving us an opportunity to review your conferencing and call rerouting telephone.

Yours very truly,

C. J. NICKELSEN,
Engineering Manager.

Exhibit 15

JANUARY 14, 1972.

Mr. HERMAN GOODRICH,
Marketing Supervisor, AT&T,
New York, N.Y.

Good morning, Mr. GOODRICH: Thank you for your telephone call of the other day. As promised, I'm enclosing some more brochures and several sets of operating instructions on the Rice MULTI-PHONE.

We appreciate your interest and look forward to giving you a demonstration at your convenience.

Thank you again.

Most sincerely,

CHARLES F. RICE,
President.

Enclosures.

Exhibit 16

FEBRUARY 2, 1972.

The Hon. ROBERT E. LEE,
*Commissioner, The Federal Communications Commission,
 Interconnection Advisory Committee,
 Washington, D.C.*

DEAR COMMISSIONER LEE: I have taken the liberty of enclosing brochures on the Rice MULTI-PHONE and respectfully ask that you inform us where we fit in. We are a miniature switchboard. So, could it be under the rules handed down by the PBX Advisory Committee? And, our unit certainly has a dial so, could it be under the D&A Advisory Committee?

We're naturally delighted with the suggestions and the rulings that are coming out of your committees. Our device has been tested for over six years under all sorts of conditions and circumstances. And, it works . . . without creating excessive voltage, improper network signaling, line imbalance or without doing any harm what-so-ever to the telecommunications networks of all the telephone companies in the United States.

Our company was formed almost two years ago, right after the issuance of our United States Patents. In this span of time we have made no attempt to sell our product to anyone outside the telephone industry. Instead, we have been seeking the Industry's acceptance and approval. And, as you no doubt know, it's been very slow in coming.

Response to recent publicity releases in such trade journals as TELEPHONY, SOUND & COMMUNICATIONS, TELEPHONE ENGINEER & MANAGEMENT and COMMUNICATIONS NEWS has indicated that we have a very saleable product. We've received over 500 inquiries from people in the industry.

We believe that we have a product that will be very useful and on that will benefit the telephone subscriber and the telephone companies as well. Our only problem is that of getting the recognition, from the industry, which we feel we *justly* deserve.

In spite of the fact that the Bell System is showing a mild degree of interest in our product, we feel that we're being stalled . . . that we're being "killed with kindness" and that this present situation is going to continue until we force the giants to recognize us. This "force" might come from "pressure" from the FCC or from our "bootlegging" our device. And, as I mentioned earlier, we've purposely avoided doing anything other than attempting to co-operate, with the industry, 100%.

AT&T's Engineering Department has passed our device on to their Marketing Department with the recommendation that Marketing try to determine if there is a market for our product. We KNOW that there is!

We know that our device will not harm their network. We know that they know that our device will not harm their network. But, at this writing, Bell is hanging its hat on the fact that an interface device is required and they are suggesting, very strongly, that it's up to us to come up with an interface device which is acceptable to them. Short of our doing this, they're willing to "create" an interface device for us but, this "creation" will "take at least a year and cost the Bell System at least \$10,000 and before we'll tackle such an undertaking, you Mr. Rice International, must prove to us that there's sufficient market for us to justify this expenditure in time and effort." But, they're saying in the same breath that without an interface device there's no way we can test the market to prove to them that our product is a saleable item. As the old saying goes, "which comes first—the chicken or the egg?"

Chairman Lee, I had not meant for this to be such a lengthy missile . . . I know that you have much to do. But, I had to attempt to tell you a little bit of our problems and frustrations with the hope that your committees, which have done so much already, might be able to help us with a solution to our problem.

Our thanks to you . . .

Most Sincerely,

RICE INTERNATIONAL CORP.,
 CHARLES F. RICE, *President.*

Exhibit 17

FEDERAL COMMUNICATIONS COMMISSION,
 Washington, D.C., February 10, 1972.

Mr. CHARLES F. RICE,
*President,
 Rice International Corp.,
 Miami, Fla.*

DEAR MR. RICE: The PBX Advisory Committee has recently recommended that the FCC establish an Advisory Committee to deal with "station apparatus."

We have asked the Chairman of the PBX Technical Subcommittee, John Wheeler, to define the items to be included in the station apparatus category. I suspect that your device would fall in this category.

I have asked Louis Feldner, the Vice Chairman of the PBX Advisory Committee, to contact you. Mr. Feldner will be able to fill you in and provide you with more detailed information.

Sincerely,

ROBERT E. LEE,
Commissioner.

Exhibit 18

MARCH 8, 1972.

Mr. HERMAN GOODRICH,
Marketing Supervisor, AT&T,
New York, N.Y.

DEAR MR. GOODRICH: Thank you very much for the time given me in our telephone conversation of this morning.

I have gone over our list of the some 600 inquiries received concerning our Rice MULTI-PHONE and have picked out most of those who showed an interest in us. All of these names are with Bell or other subsidiaries. I'm sure also that I've probably missed a few. But, here's a sampling.

K.P. Finch, Staff Supv.
Pacific Tel & Tel
San Francisco
J.H. Durst, Comm. Cons.
Pacific N.W. Bell
Salem, Oregon
R.K. Thue, Comm. Const.
Pacific Tel & Tel
Redding, California
W.M. Turk, Gen. Pricing Dir.
Pacific Tel & Tel
San Francisco
D.E. Davis, Data Mgr.
Pacific Tel & Tel
Palo Alto, California
D. Hester, Comm. Cons.
Pacific Tel & Tel
Visalia, California
N.E. Stickle, Engr.
Pacific Tel & Tel
San Francisco
R. McClelland, Sr. Engr.
Pacific N.W. Bell
Seattle, Washington
B. Dulberg, PBX Instr.
Pacific Tel & Tel
San Francisco
L.W. Richardson, Eqpt. Engr.
N.W. Bell Tel. Co.
Omaha, Nebraska
T.S. Sullivan, Proj. Engr.
N.W. Bell Tel. Co.
Minneapolis
R.C. Struck, Comm. Mgr.
Mountain Bell
Colorado Springs
T.W. Shumate, Supv. Engr.
Mountain Bell
Colorado Springs.
M. Sloane, CSR
New Jersey Bell Tel
Parsippany, N.J.
K.D. Hepper
Bell Tel Lab
Holmdel, N.J.
H. Smith
Ill. Bell Tel,

Lake Forest, Ill.
D.P. Gary, Comm. Rep.
Mich. Bell Tel. Co.
Grand Rapids, Mich.
J.F. Watkins, Mktg. Mgr.
S.W. Bell Tel
Clayton, Mo.
C.R. Murdock, Engr.
Indiana Bell Tel Co.
Indianapolis
G. Galassini, Comm. Cons.
Ill. Bell Tel Co.
Chicago
E.G. Arnold, Comm. Mgr.
S.E. Ohio Tel Co.
Quaker City, Ohio
K.F. Feld, Staff Engr.
Ill. Bell Tel Co.
Chicago
R.A. Rapp, Sales Manager
N.W. Bell
 Fargo, N.D.
J.F. Maloney, Sales Mgr.
Bell Tel Co./Pa.
Allentown, Pa.
J. Bond
Bell Northern Res.
Ottawa, Ont. Canada
J.E. Champagne, Engr. Assco.
Bell Canada
Montreal, Que.
M.B. Hephner, Comm. Cons.
Ohio Bell
Youngstown
C.L. Schaeffer, Jr. Mgmt. Asst.
Michigan Bell Tel
Northville, Mich.
A.E. Joel, Cons.
Bell Tel Labs
Holmdel, N.J.
A.T. Gottlieb
N.Y. Tel Co.
Brooklyn, N.Y.
Jim Mossbarger
Western Electric
Cuarate, California

I count 31 names. Now, in addition to those from Bell who were good enough to show interest, we have a like number from ITT, Gen. Tel., Stromberg Carlson, RCA and others.

As I said to you on the phone this morning, we have a marketable product. We want you to give us a chance to prove it to you.

I'll send along the other information, which I promised, under separate cover later this week.

I've asked Charles Rice to help me prepare the data which we want to place in your hands.

Mr. Goodrich, my thanks to you again . . . we appreciate your interest.

Most sincerely,

RICE INTERNATIONAL, INC.,
FRITZ GIBSON, JR., *Director of Sales.*

Exhibit 19

AMERICAN TELEPHONE & TELEGRAPH Co.,
New York, N.Y., May 18, 1972.

Mr. BERNARD STRASSBURG,
*Chief, Common Carrier Bureau,
Federal Communications Commission,
Washington, D.C.*

DEAR Mr. STRASSBURG: Our letter of November 20, 1970 to you announced that certain tariff modifications would be undertaken to permit the use of customer-provided tone-type signalling equipment for the purpose of performing the address signalling portion of network control signalling. Appropriate modifications were subsequently filed. Those modifications were deemed appropriate as a result of the continuing review of interconnection matters by the Bell System.

Our further efforts in this area have provided information which suggests that modifications to our tariffs may be made to accommodate an alternative means for connection of certain kinds of customer-provided terminal equipment without undue jeopardy to the service capabilities of the telecommunications network or the employees that operate and maintain it. Certain portions of the planned new approach to these devices closely parallel the efforts now underway in the F.C.C. PBX Standards Advisory Committee and have been influenced by the cooperative discussions of the many participants in the Committee meetings.

Each type of communications equipment has a certain potential for causing harm resulting from its specific application, its inherent functions, design, installation, and/or continued maintenance. As recognized by the F.C.C. PBX standards Advisory Committee, factors which have a potential for causing harm must be controlled. One means of control which has been advanced is "manufacturer attestation" of compliance to specified standards which apply to those aspects of the equipment which have a limited potential for causing harm. More stringent measures are recognized by the Advisory Committee as being necessary for the more critical areas.

We have attempted to identify a unique class of equipment for which the potential for causing harm is extremely limited, thus permitting less stringent requirements as explained below. This approach employing manufacturer attestation, is not applicable to all types of equipment and should not be viewed as applicable to customer-provided equipment which incorporates functions listed in the areas of the five general criteria listed below.

Briefly, the proposed tariff modifications will provide for the direct electrical connection of certain customer-provided headsets and conferencing devices, subject to those devices meeting certain standards and procedures which will be prepared and advanced by the Bell System. Those devices that meet the following general criteria will come within the proposed new tariff provision:

1. Device has no power source external to the facilities supplied by the Bell System.

2. Device does not require grounding.

3. Device has no amplification which may exceed the presently specified network protective criteria.

4. Device has no permanent wiring (other than cords equipped with portable type connectors).

5. Device performs no network control signalling functions prior to and including establishment of the intended transmission path.

Procedures will be formulated for the manufacturer or distributor of such de-

vices to provide the Bell System with an attestation of compliance to the appropriate standards for his devices.

The standards will be published in the form of Technical References which will be readily available to anyone wishing to obtain them. Physical connections of these devices to Bell System services must be made via a standard telephone company-provided connector, e.g., jack for a plug or specified multi-lead connector.

As you can see, this approach will permit the direct electrical connection of headsets and conferencing devices that have no external power and meet the applicable standards. Additionally, we believe it may be practical to permit, in a similar manner, the direct electrical connection of conferencing devices which have the requirement for connection to an external power source if adequate assurance can be obtained that the power supply will not harm the service capabilities of the network or our employees. We believe that such assurance can only be attained through use of independent testing laboratories to certify compliance of the equipment to certain standards that the Bell System will provide for use by those laboratories. We also feel that it is appropriate for the Regulatory Agencies to designate and exercise control over those testing laboratories. Since tariff modifications will be initiated in both the interstate and intrastate jurisdictions, it would be beneficial for all concerned if arrangements could be made for the designation of laboratories acceptable to both the State and Federal Regulatory Bodies.

While considerable effort is yet required to prepare the standards, procedures and tariff material to begin implementation of this program, we felt it was appropriate to announce our intentions at this time. It is probable that the outlined program will be implemented in three steps to permit direct electrical connection of devices which meet the aforementioned criteria:

1. Tariff modifications to permit the attachment of headsets.
2. Tariff modifications to permit the attachment of conferencing devices with no external power requirement.
3. Tariff modification to permit the attachment of conferencing devices which employ external power.

It appears that we will be able to advance firm details and proposed tariff modifications relating to Step 1 above by about mid-summer with the remaining steps to be completed before the end of the year.

Should our experiences with connection of devices under the proposal indicate that additional protective measures are required to adequately protect the service capabilities of the network or our employees, we will, of course, find it necessary to modify or withdraw the tariff filings.

We will be pleased to keep you advised as our plans progress further.

Very truly yours,

T. W. SCANDLY,
Assistant Vice President.

Exhibit 20

RICE INTERNATIONAL CORP.,
Miami, Fla., June 3, 1972.

Mr. BERNARD STRASSBURG,
*Chief, Common Carrier Bureau,
Federal Communications Commission,
Washington, D.C.*

DEAR MR. STRASSBURG: We were in the offices of Mr. Louis Feldner during the week of May 15th, 1972. Mr. Feldner suggested that we address this letter to you.

We have a problem! Our Patented conference and call rerouting device (brochures enclosed) and our company, Rice International Corporation, are being discriminated against by AT&T, the Bell System and others, in the telecommunications industry.

We are being denied the right to provide a definite service to telephone subscribers throughout the United States. And, these same companies are denying our Company its right to make a profit.

Rice International Corporation was incorporated in the State of Florida two years ago . . . for the purpose of manufacturing and marketing the Rice MULTI-PHONE. In the two years that we have been in business we have purposely refrained from selling our product to anyone outside the telecommunications industry. (We have tried to be cooperative and not bootleg or blackmarket our device, as others have, since the Carterfone decision.)

During this period, we have loaned or sold approximately 20 Rice MULTI-PHONES for testing and evaluation purposes.

Our product has undergone extensive field testing (for over 7 years); Stromberg-Carlson, Charlottesville, Virginia, has made audio tests (a copy of their written report is marked "Exhibit A" and is enclosed); We are in the process of getting the Underwriters Laboratories Seal; And, our device and the results of the various tests have been in the hands of the Rural Electrification Administration, in Washington, for REA approval.

Our product has passed every imaginable test. We know, and we know that the Bell System knows, that there is no possible way that the use of our conference and call rerouting telephone could create problems in the telephone network of local and long distance lines. And yet, tariffs obtained by the so-called giants of the industry have us "boxed-in". We can't move legally. We are not permitted to provide a *very marketable service* to telephone users. We can't even earn a profit for our shareholders.

Please allow me another moment to set down a series of frustrating chronological events. (For support, please see Exhibits "B", "C" & "D".)

1. June 1970: First contact with Southern Bell, Miami. Purpose—to expose our device to Bell with the thought that they might want to market.

2. August, 1970: Contacted AT&T, in New York City. Our (Chief Engineer, Eddie Currie and I, visited them (at their request) shortly after the initial contact. Again, at their request, we left copies of our U.S. Patents and our schematic drawings.

3. February, 1971: Bell installed interface device which completely isolated us from their network. Monthly charges for interface continued to be added to our telephone bill for 4 or 5 months after interface had been removed. The interface *never* worked.

4. October, 1971: Visit from Mr. Bob Rivenes of AT&T's New York Engineering staff. Visit made at the request of local Bell Manager after our threatening litigation to force Bell to provide us with an interface device. Mr. Rivenes made the following statement: "We'll be happy to provide you with an interface device. But, it will take us approximately 12 months to do so and will cost Bell approximately \$10,000.00.

5. January, 1972: Mr. Herman Goodrich, AT&T's Marketing Supervisor (in New York City) telephoned and volunteered the information that our circuitry had passed AT&T's Engineering requirements and that he had been asked to undertake a market study to determine the sales potential of the Rice MULTI-PHONE.

6. February, 1972: See Exhibit "E" . . . shot down again by a Denver AT&T Engineer whose statements in his letter of February 14th, 1972, aren't at all relevant to our "problem".

In summation, may I say, *we are frustrated*. We see so many "foreign" attachments being advertised and marketed. And, these manufacturers are getting away with it. And yet, when we go by the book and try to do what is right, we get slapped down by Bell, or AT&T, at every turn.

Mr. Strassburg, it's not fair for us to be treated as we have been . . . it's not fair for us to be denied the right to market our product. We are tired of being at the mercy of the larger telecommunications companies. We need your help!

Thank you very much. If we can supply additional data, please let us know.

Most sincerely,

RICE INTERNATIONAL CORPORATION,

CHARLES F. RICE, *President*.

Enclosures.

Enclosure A

STROMBERG-CARLSON.

A SUBSIDIARY OF GENERAL DYNAMICS.

Charlottesville, Va., May 31, 1972.

MR. CHARLES F. RICE,
*President, Rice International Corp.,
Miami, Fla.*

DEAR MR. RICE: Attached is the supporting information for the curves run in our laboratory during your recent visit to Charlottesville.

Very truly yours,

E. S. HINELINE, JR.,

Technical Staff Engineer, Telephone Design.

Attachment.

B. Air to Air sweep response measurements were made for various possible connections including from A directly to C as a zero loss reference. The power

supply was adjusted to produce an average current of 100, 50 and 20 ma in each loop. When set up for a three way conference, the Multi-Phone current is divided between the talking circuit and the holding coil.

4. Results.

Average sweep response of the various arrangements relative to the two telephones referenced are tabulated below:

Transmitting telephone	Receiving telephone	Circuit	Relative response
A.....	C	Direct.....	0
A.....	C	-2
A.....	B	-2
C.....	B	-1
C.....	B	Conference.....	-2
A.....	B	do.....	-2
A.....	C	do.....	-1
B.....	C	do.....	-11
B.....	A	do.....	-9

The relatively large loss when the Multi-Phone is used as the transmitting telephone in a three way conference is felt to be the result of current supply loss and bridging loss at the third telephone and at the holding coil.

E. S. HINELINE, JR.

TESTING PROGRAM PERFORMED ON THE RICE INTERNATIONAL MULTI-PHONE

1. TEST EQUIPMENT

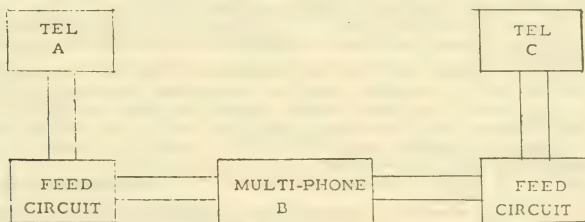
- A. B&K 3352 Electro-Acoustical Transmission Measuring Set.
- B. Battery Feed circuits composed of two standard pulsing relays and two MF capacitors per IEEE Standard #269.
- C. Power Supply, Hewlett Packard #6299A, operated in the constant voltage mode.

2. PROCEDURES AND CALIBRATION

All procedures were in accordance with IEEE #269 as applicable. The artificial voice level was set at 94 db R.A.P. and the recorder level was adjusted to show 20 db on the chart for a 94 db R.A.P. sound pressure in the artificial ear coupler.

3. TESTS PERFORMED

A. Set-up



Telephones A and C were S-C 500 Type telephones; telephone B was a Rice Multi-Phone.

Enclosure B

RICE INTERNATIONAL CORP.,
Miami, Fla., September 13, 1971.

Mr. STUART W. PATTON, Esq.,
Law Offices, Patton, Kanner, Nadeau, Segal & Stobbs,
Miami, Fla.

DEAR MR. PATTON: We have a problem! AT&T and the Bell System are "killing us with kindness" . . . as only these people can do.

Back in June of 1970 (well over a year ago) we contacted Mr. Brian Cosgrove, one of Southern Bell's marketing men here in Miami. We naturally wanted to expose the Rice Conference and Call Rerouting telephone to them with the hope that Bell and AT&T might consider entering into a marketing arrangement with us. (Mr. Cosgrove gave us much encouragement). After listening to our story, Mr. Cosgrove suggested that we contact an AT&T Special Department, in NYC, supposedly set up for the purpose of reviewing new products coming on the market. Following Mr. Cosgrove's suggestion, on August 8th, 1970, we wrote a letter to the ENGINEERS, DIRECTORS & CUSTOMERS TELEPHONE SYSTEM, in care of AT&T in NYC. And then, our troubles really began. This initial contact was followed by many, many letters back and forth. In addition, Eddie Curie, our Chief Engineer, and I made a trip to New York City, to sit down with their Engineers three. We left them with copies of our U.S. Patents and the schematic drawings on our solid state circuitry and supervisory lighting system . . . giving a full and complete disclosure on the workings of our device.

All our efforts, many of which I'm leaving out of this letter to you, finally climaxed in February of 1971, with us, (at the suggestion of AT&T, NYC) making a formal request for an interface device. An "interface" device is a little money-maker devised by Bell, ostensibly to protect their network from harmful attachments. (The telephone company knows that there's just no way that our circuitry could cause any harm whatsoever to their network.) But, at the moment the Florida Public Service Commission allows the telephone companies to require such a device.

For your information, the California Public Utilities Commission recently issued a cease and desist order to General Telephone, preventing that company from interfering with the installation of a foreign attachment, proven not to harm General's network.

Since we chose Miami as a pilot market and since we wanted to continue in the spirit of cooperation, we requested that Bell install an interface device at our offices for demonstration purposes. At the outset they (Bell) appeared to want to cooperate with us. They sent installation crews, supervisors AND interface devices out here, some 4 or 5 times. The only trouble is, NONE of them worked. As a matter of fact, I wound up showing Bell's people how to hook the coupler to our lines and I attempted to show them just what our requirements were . . . they didn't even know that!

Now, eight months have passed . . . our sales are zero! We strongly believe that AT&T, NYC and Bell, Miami, made promises to us which they never intended to act upon.

In early June, 1971, when Bell first attempted to install an interface device, monthly charges for the coupler began to appear on our telephone bill. As of the date of this letter to you, these monthly charges are piling up and are still appearing on our bill. And yet, we do not now, nor have we ever had, an interface device completely installed and working. Their connecting arrangement is still hanging on our wall . . . just where they left it, as though the installation man through up his hands in anguish and walked away from the task. And, that's just about what he did.

Our electronic circuitry is installed in an ITT model #510 (or comparable) telephone. This instrument is identical to Western Electric's model #310. We add a solid state, electronic circuit which provides a *new service* to telephone subscribers . . . a service not now available and not now provided by Bell or any other telephone company, in this form. Our circuitry is 100% compatible with *all* types of switching and signaling equipment in the entire telecommunications network, throughout the United States . . . a point which we'd have very little difficulty proving if we could just get some of these people to listen to us. When they do listen, they hear only what they want to hear.

We now feel that the time has come to *force* them to move. We believe that

the Federal Communications Commission and the Florida Public Service Commission should know about the run-around (and that's all that it is) that we've been getting from AT&T and from Southern Bell. Not only have we spent considerable time, effort and money in letters, telephone calls, etc. but, worse than that, 8 to 9 months have gone by and we've missed a selling opportunity while waiting on this "giant" to start living up to the promises made to us when all these negotiations originated.

What would you do Mr. Patton? I await your advice.

Thank you very much.

Most sincerely,

CHARLES F. RICE, *President.*

Enclosure C

SOUTHERN BELL,
Miami, Fla., September 30, 1971.

Mr. STUART W. PATTON,
Miami, Fla.

DEAR STUART: I appreciate your giving me an opportunity to assist you in solving the dilemma of your client, Rice International Corporation.

My investigation reveals that your client was put in contact with a representative from AT&T about August, 1970. At that time, your client was interested in knowing if the Bell System would like to acquire rights to his patent.

Mr. Rice and several AT&T representatives exchanged correspondence until February 25, 1971 relative to this subject. All parties informed Mr. Rice that the Bell System would not be interested in obtaining rights to his patented instrument. On January 28, 1971, Mr. Rice wrote to one of our local Marketing representatives, Mr. Ken Johnson, and thanked him for his interest in this subject. He also verbally requested that Mr. Johnson assist him in obtaining an interface device that would allow him to connect his instrument with existing telephone facilities.

Requests, such as the one made by Mr. Rice, are referred to the appropriate organization at AT&T headquarters; this was promptly done. Since that time, AT&T and local representatives have relentlessly tried to establish compatibility between the existing network and Mr. Rice's instrument. Although we have a large number of interface devices, none of them have successfully coped with this problem. During our efforts we attempted to use or most recently developed interface device for which a tariff has not been established; all has been in vain up to this point.

Stuart, I am sure the past I have recounted is of interest. However, I know you are more interested in the action I have taken. I have telephoned Mr. C. R. Williamson, AT&T Assistant Vice President, and discussed this situation. He is sending his personal representative, Mr. Rivenes, to Miami next week to meet with Mr. Rice and other members of his organization. Mr. Rivenes will contact Mr. Rice to set up an appointment. Mr. Rivenes will be able to clearly discuss with Mr. Rice the probability of establishing compatibility between his instrument and our existing telephone facilities.

I am sure your client, Mr. Rice, will be in touch with you as a result of this interview. I would appreciate your letting me know if I can be of further assistance.

Sincerely,

LAURESSA.

Enclosure D

RICE INTERNATIONAL CORP.,
Miami, Fla., June 3, 1972.

Mr. BERNARD STRASSBURG,
Chief, Common Carrier Bureau,
Federal Communications Commission,
Washington, D.C.

DEAR MR. STRASSBURG: Regarding the Implementation of External Power Sources in conjunction with user supplied telephone equipment within the Bell System:

It is not the purpose of this discussion to establish a case for the industry as to the feasibility of employing power sources other than those provided by the Bell System for user owned equipment. Rather, we wish to consider a specific case, viz., that of the Rice Multi-phone.

The telephone device presently offered by Rice International Corporation re-

quires, for its full utilization, an external power sources. Since external power supplies can, in principle, result in possible harm to the user, or to Bell Communications Equipment, particular care has been taken to insure that the Rice MULTI-PHONE is absolutely safe in both respects.

An especially designed transformer, for which our subcontractor has applied for Patents, is employed to provide (a) isolation between individual phone lines so as to eliminate the possibility of cross coupling and (b) electrical isolation between the power source and the user and/or Bell System Equipment.

It should be carefully noted that the external power source is used to power the solid state circuitry which determines the status of the Bell lines, hereafter referred to as the supervisory circuitry, and it not part of the actual conferencing and rerouting circuitry.

Thus the power source is well isolated from the phone lines and the power lines. Since the use of isolation transformers has been an accepted practice in the electronic industry for many, many years it is apparent that the only possible source of difficulty would be leakage between the primary and secondary windings of the transformer.

The present state of the art of transformer manufacturer renders such possibility extremely unlikely and our manufacturer stands ready to supply quantitative data in this regard.

It is interesting to note that Bell has utilized transformers in most of their interfacing devices to avoid harm and afford protection from just this type of problem.

Therefore, we believe that the Rice MULTI-PHONE can in no way afford serious possibilities of injury, either to the user or the Bell System. And, we are prepared to meet any claims to the contrary with both qualitative and quantitative data.

Thank you very much.

Very truly yours,

EDDIE CURRIE,
Chief Engineer.

[Enclosure E omitted ; Same as exhibit 14.]

Exhibit 21

FEDERAL COMMUNICATIONS COMMISSION,
Washington, D.C., June 22, 1972.

AMERICAN TELEPHONE & TELEGRAPH Co.,
New York, N.Y.

GENTLEMEN: Enclosed is a copy of a letter dated June 3, 1972 which the Commission received from Mr. Charles F. Rice, President of Rice International Corporation. Mr. Rice complains that the Bell System will not provide a connecting arrangement for use with his company's product known as the Multi-Phone.

The Commission pursuant to Section 1.717 of the Commission's Rules, requests your company to satisfy the complaint or advise the Commission of your refusal or inability to do so. Your reply, in duplication, will be appreciated, within thirty days of the date of this letter.

Sincerely yours,

KELLEY E. GRIFFITH,
*Chief, Domestic Rates Division,
for Chief, Common Carrier Bureau.*

Enclosure :

Exhibit 22

FEDERAL COMMUNICATIONS COMMISSION,
Washington, D.C., July 27, 1972.

CHARLES F. RICE,
*President, Rice International Corp.,
Miami, Fla.*

DEAR MR. RICE: This is in reference to our previous correspondence concerning your complaint that the Bell System will not provide a connecting arrangement for use with your company's device known as the Multi-Phone. We have received a reply from the telephone company in response to the inquiry which was

made on your behalf. A copy of the company's letter of July 24, 1972, is enclosed for your information.

It is noted the telephone company states that a new connecting arrangement is presently under development which it believes may be suitable for use with the current model of the Multi-Phone.

It is hoped that you will find the foregoing and the attached material informative.

Sincerely yours,

KELLEY E. GRIFFITH,
Chief, Domestic Rates Division,
for Chief, Common Carrier Bureau.

Enclosure :

Exhibit 23

AMERICAN TELEPHONE & TELEGRAPH Co.,
New York, N.Y., July 24, 1972.

Mr. KELLEY E. GRIFFITH,
Chief, Domestic Rates Division
Federal Communications Commission,
Washington, D.C.

DEAR MR. GRIFFITH: This is in reply to your letter dated June 22, 1972, (Reference 9310) which enclosed a copy of a letter from Mr. Charles Rice, President of Rice International Corporation. Mr. Rice describes his efforts which were designed to either obtain Bell System acceptance of his Multi-Phone as a product line of the Bell System or failing that, to obtain a protective connecting arrangement with which his device would be compatible.

In mid 1970, Rice International Corporation submitted copies of patents and schematic drawings of the Multi-Phone to AT&T for examination to determine whether the Bell System might wish to include that device as a part of its product line. Mr. Rice was later informed by letter that the Bell System was not interested in the purchase of his Multi-Phone.

As you know, we have followed a policy of full cooperation with manufacturers who have made known to us their interest in obtaining a suitable connecting arrangement which will satisfactorily provide for the connection of their equipment to the telecommunications network. We supply them with information which will enable them to make their product compatible with Bell System protective connecting arrangements. This information was supplied to Mr. Rice through his discussion with our Engineering personnel and by our providing him with copies of Technical References for various connecting arrangements.

Mr. Rice's attempts to connect the Multi-Phone to the communications network using the CEB, and later the STC connecting arrangements were unsuccessful since the Multi-Phone apparently is not designed to be compatible with the interface specifications presented by these connecting arrangements. Rice International Corporation appears to be unwilling or unable to modify the design of the Multi-Phone so as to achieve compatibility with the existing connecting arrangements.

As a result of our continuing discussions with manufacturers such as Mr. Rice, a new connecting arrangement is presently under development that will accommodate the use of customer-provided terminal equipment (i.e., key systems) and which will incorporate features we believe may make this arrangement suitable for use with the current model of the Multi-Phone. Present estimates indicate the introduction of this connecting arrangement early in 1973. The Technical Reference for this arrangement will be provided to Rice International Corporation as soon as it is available.

Mr. Rice alleges that he was advised by us that the Multi-Phone circuitry has "passed AT&T's Engineering requirements." We are unaware of any standards that have been developed for this type of terminal equipment and deny that it passed our requirements. Further, Mr. Rice was informed by letter on February 14, 1972 that we do not believe that his device would "warrant standardization for general use in the Bell System."

Mr. Rice's allegation that he was told AT&T would "undertake a market study to determine the sales potential of the Rice Multi-Phone" is also denied. Our Marketing and Service Plans Department did agree to discuss the Multi-Phone device with marketing personnel in some of the Associated Companies, and

when this was done it was found that interest in the device was insufficient to warrant further market investigation.

We trust this provides you with the desired information.

Very truly yours,

T. W. SCANDLYN,
Assistant Vice President.

Exhibit 24

JULY 31, 1972.

MR. KELLEY E. GRIFFITH,
Chief, Domestic Rates Division
Federal Communications Commission,
Washington, D.C.

DEAR MR. GRIFFITH: Thank you . . . we received the copy of Mr. T. W. Scandlyn's letter in this morning's mail.

We are prepared to answer him and refute many of the statements that he made, paragraph by paragraph. But, before doing this we respectfully point out that Mr. Scandlyn has still not answered your request in your letter to American Telephone & Telegraph, dated June 22nd, 1972. I quote the last paragraph of your letter: "The Commission pursuant to Section 1:717 of the Commission's Rules, requests your company to *satisfy the complaint* or advise the Commission of your *refusal or inability* to do so. Your reply, in duplicate, will be appreciated, within thirty days of the date of this letter."

Mr. Scandlyn has still not satisfied our complaint. Instead, he continues to give us the same "double-talk" which we should now be used to getting from AT&T and Bell. It's been our experience that they "say" one thing and "write" another.

We continue to take the position that the Bell System and AT&T *REFUSE* to supply us with a connecting arrangement . . . we can prove that our Multi-Phone is compatible with every piece of equipment presently in use by Bell.

We continue to need your help and advice!

Thank you very much.

Sincerely,

CHARLES F. RICE, *President*.

Exhibit 25

SEPTEMBER 15, 1972.

MR. KELLEY E. GRIFFITH,
Chief, Domestic Rates Division,
Federal Communications Commission,
Washington, D.C.

DEAR MR. GRIFFITH: On July 31st, 1972, we wrote to you with the plea that Mr. T. W. Scandlyn, of AT&T, New York, has still not satisfied our complaint.

According to our interpretation of your rule in Section 1.717, AT&T (in this case) must "satisfy the complaint or advise the Commission of its refusal or inability to do so". AT&T has not satisfied our complaint . . . AT&T has not refused to satisfy our complaint and AT&T has not advised you of its inability to do so.

Mr. Scandlyn did say, in his July 24th letter to you, "a new connecting arrangement is presently under development that will accommodate the use of customer-provided terminal equipment (e.g., key systems) and which will incorporate features we believe may make this arrangement suitable for use with the current model of the Multi-Phone. Present estimates indicate the introduction of this connecting arrangement early in 1973." We first heard a statement similar to Mr. Scandlyn's, from Mr. Bob Rivenes, of AT&T's Engineering Staff . . . on his visit to our Miami offices, in October of 1971. Mr. Rivenes said that AT&T would develop a connecting arrangement at a cost of about \$10,000.00 and it would take about a year to complete the interface device and have it ready for use by Rice International Corporation. Now, in July of 1972, Mr. Scandlyn says that it'll be ready "early in 1973".

Rice International Corporation is still in a position where it's not able to enter the market place. We have formally approached the regulatory agency, the Federal Communications Commission for assistance. We don't know where we stand because there's been no reply to our letter to you dated July 31st, 1972.

I have enclosed a photo-copy of an article from Telephone Engineer & Management, from their August 1st, 1972 issue.

From the tone of this article, our plea has not fallen on deaf ears—if we can

rely on the source of the reporter's information. But, we still do not know for sure as we've received no definitive answers from AT&T nor have we received an answer from the Commission.

We are reluctant to take this magazine article as a formal reply because we need more than this before taking our next step.

We cannot keep our product off the market until AT&T gets around to providing us with a connecting arrangement. We believe that it's very unfair that we be expected to do so . . . particularly since we know that AT&T knows that there's no way that the Rice Multi-Phone can, or will be harmful to their network.

AT&T is simply using all the delaying tactics at their command to keep us, and others like us, out of the market place for as long as they possibly can.

Thank you, Mr. Griffith.

Sincerely,

CHARLES F. RICE, *President.*

Enclosure

PAYSTATION SECURITY

(By Fred Hank)

Losses: Paystation losses occur in two ways, 1. Vandalism and Theft, 2. Cheating in making calls.

THEFT AND VANDALISM

CEEEO PAYSTATIONS discourage theft and vandalism by making it difficult. A thief will not attempt to steal from a paystation if it takes him more than five or six minutes to open the cash box. The CEEEO locks make it almost impossible to get into the cash box in less than ten minutes by picking the locks. The strength of the stainless steel housing and the mounting bracket assembly make it almost impossible to pry open the cover.

COIN CHEATING

Credit card cheating and walking away on overtime calls we cannot do much about; that requires effort on the Telephone Security Division. However, the CEEEO Paystation will not permit the thief to use slugs or cheaper coins. Nor can the thief use the "peanut" or "cereal box" whistle with or without the little black box oscillator by dialing a 555 or 800 number.

COSTS

Naturally security costs. However, the CEEEO Type 200 Paystation is so much more economical than the existing system that it is more than worth the investment.

Where high-security is not needed, the CEEEO Standard model is adequate and more economical.

CA POLICY CLARIFICATION

The practices and policies of AT&T in furnishing connecting arrangements for customer-provided equipment are at variance with its tariff language on the subject. the FCC's Common Carrier Bureau has stated, in suggesting tariff changes.

If the present tariff language is construed in favor of the customer, the bureau said, it states that "the telephone company will provide a network control signaling unit and connecting arrangement for any item of customer-provided equipment. The tariff does not state that connecting arrangements are available only for customer-provided equipment which was either designed in accordance with your technical references or for which the manufacturer has cooperated with (AT&T) in the development of a new standard arrangement."

The bureau emphasized that it did not wish to imply it had concluded that the company should make the offering implied by the tariff language. It suggested, as a result, that AT&T "may wish to consider modifications in your tariff language which set forth the limitations which you believe might be reasonable on your obligation to provide a connecting arrangement."

Since the practice is in "direct conflict" with the offering, the bureau said, it may recommend forfeitures in any complaint where it is established that the telephone company was unable or unwilling to provide connecting arrangements or network control signaling units, "until the two are brought into concert."

Exhibit 26

FEDERAL COMMUNICATIONS COMMISSION,
Washington, D.C., September 26, 1972.

AMERICAN TELEPHONE & TELEGRAPH Co.,
New York, N.Y.

(Attention, Thomas W. Scandlyn, Assistant Vice President)

GENTLEMEN: Enclosed is a copy of a letter dated September 15, 1972 which the Commission received from Mr. Charles F. Rice, President of Rice International Corporation. Mr. Rice complains, in addition to other matters, that your company is intentionally delaying the introduction of a connecting arrangement for use with his company's device known as the Multi-Phone.

The Commission, pursuant to Section 1.717 of the Commission's Rules, requests your company to satisfy the complaint or advise the Commission of your refusal or inability to do so. Your reply, in duplicate, will be appreciated, within thirty days of the date of this letter.

Sincerely yours,

KELLEY E. GRIFFITH,
Chief, Domestic Rates Division,
for Chief, Common Carrier Bureau.

Enclosure:

Exhibit 27

JULY 17, 1972.

Mr. FLOYD JORDAN,
Dispatch Services,
Miami International Airport,
Miami, Fla.

DEAR MR. JORDAN: Representatives of Southern Bell Telephone and Telegraph Company have observed your use of a "Conference and Rerouter Phone" which is connected directly to our facilities.

Paragraph b4 of Section 34 of our General Exchange Tariff, on file with the Florida Public Service Commission contains the following provisions:

"Where the use of any customer-provided terminal equipment as specified in these regulations involves direct electrical connection to the facilities furnished by the Telephone Company such connection shall be made through a connecting arrangement furnished, installed and maintained by the Telephone Company."

Furthermore our Interstate Tariff FCC No. 263, on file with the Federal Communications Commission, also requires the use of a proper connecting arrangement.

In requesting that you disconnect the "Conference and Rerouter Phone" which is connected to your service, we must further ask that you give us confirmation following your receipt of this letter of its disconnection. If we do not receive such confirmation we have no alternative but to discontinue your service pursuant to paragraph A7 of Section 34 of our General Exchange Tariff which is in effect in the State of Florida. That paragraph reads as follows:

"Where any customer-provided equipment or system is used with telecommunications service in violation of any of the provisions in this tariff, the Telephone Company will take such immediate action as necessary for the protection of its services, and will promptly notify the customer of the violation. The customer shall discontinue such use of the equipment or system or correct the violation and shall confirm in writing to the Company within 10 days, following receipt of written notice from the Company, that such use has ceased or that the violation has been corrected. Failure of the customer to discontinue such use or to correct the violation and to give the required written confirmation to the Telephone Company within the time stated above shall result in termination of the customer's service until such time as the customer complies with the provisions of this tariff."

We must receive this confirmation no later than 8:00 AM July 27, 1972, otherwise your service will be disconnected at that time.

Should you desire, we are prepared to discuss the matter of Telephone Company provided connecting arrangements with you.

Yours very truly,

District Marketing Manager.

Exhibit 28

MIAMI, FLA.,
July 18, 1972.

Mr. B. D. WILLIAMS,
District Marketing Manager,
Marketing Department,
Southern Bell,
Miami, Fla.

DEAR MR. WILLIAMS: I am in receipt of your letter of July 17th with reference to the conference and rerouter phone which is stated in your first paragraph is connected directly to your facilities.

If you will research your records you will find that this connection was made by Bell Telephone installation personnel. This connection was made some two years ago.

I will skip replies to the balance of your letter with the exception of your last paragraph where you state "Should you desire, we are prepared to discuss the matter of Telephone Company provided connecting arrangements with you." This was done in the original installation, however, if you have other means available that are more suitable to your desires I certainly would like to hear about them.

Looking forward to your reply, I remain

Very truly yours,

F. D. JORDAN.

Exhibit 29

SOUTHERN BELL,
Miami, Fla., July 25, 1972.

Mr. F. D. JORDAN,
Dispatch Services, Inc.,
Miami, Fla.

DEAR MR. JORDAN: This is in reply to your letter dated July 18, 1972, concerning a connecting arrangement for privately-owned equipment with the Telephone Company.

Southern Bell's interconnection procedures for the provision of voice connecting arrangements is implemented when the customer places his order. Orders for voice connecting arrangements should be placed by the customer using the desired arrangement (USOC/Equipmnt) designation. If the customer does not know what arrangement to order, he should be referred to his equipment supplier for the proper arrangement. It is the Telephone Company's position that the customer must arrange for the design, engineering, installation and maintenance of his equipment and that the Bell System will provide the type interconnection arrangement specified by the customer. This is for the customer's protection as well as the Telephone Company's. We (Southern Bell) do not know the technical details of the various manufacturers' equipment, nor with which of the connecting or access arrangements it is compatible.

Customers requesting detailed technical information regarding a voice connecting arrangement should be referred to the appropriate technical reference.

As a result of this procedure, many meetings have taken place with representatives of Rice International Corporation Electronics, American Telephone and Telegraph Company, and our Company. Several letters have been written by all concerned trying to satisfy customer requests like yours for using this equipment. Presently, this manufacturer's equipment is not compatible to any voice connecting arrangement that is available.

Because of the fact that the Rice International Corporation Electronics Conference and Re-Router Phone is not compatible to available interface devices, we encourage you to discontinue use of this equipment on or before July 27, 1972. Failure to discontinue use of this equipment shall result in termination of your telephone service until such time as you comply with the provisions of the tariff.

Yours very truly,

District Marketing Manager.

Exhibit 30

MIAMI, FLA., October 3, 1972.

Mr. B. D. WILLIAMS,
*District Marketing Manager,
 Marketing Department,
 Southern Bell,
 Miami, Fla.*

DEAR MR. WILLIAMS: In reply to your letter of July 25, 1972, Southern Bell Telephone Company personnel installed a four-conductor, female jack in my office over two years ago.

I refer to your letter, dated July 17, 1972, more specifically, paragraph three: "Where the use of any customer-provided terminal equipment as specified in these regulations involves direct electrical connection to the facilities furnished by the Telephone Company such connection shall be made through a connecting arrangement furnished, installed and maintained by the Telephone Company." This four-conductor, female jack, installed by Southern Bell, is under interstate Tariff FCC No. 262 (mentioned in paragraph four of your letter of July 17, 1972). I am certain that Southern Bell, having a complete monopoly (in this area) in the telecommunications field, knows that according to your own tariffs, the four-conductor, female jack is a proper connecting arrangement.

With all the telephone conversations between your office, my office and the offices of Rice International Corporation, plus the meeting held in Rice International's offices in October, 1971, between you, your engineers and Bob Rivenes of AT&T, New York, I cannot for the life of me understand why now, 10 months later, you are citing your tariff regulations to me.

In addition, as you and Southern Bell know, I have had the Rice Multi-Phone installed (by Southern Bell) and it's been in use for over two years and has not caused or created any harm to Bell's network of lines.

I have been using the device for over two years; I have found a definite need for it... a need which cannot be supplied by Southern Bell but only by Rice International Corporation. By forcing me to remove this Multi-Phone, you are denying me (and many other businessmen like me) the use of a telecommunications device which I find very helpful in my business.

I refer now to your letter of July 25, 1972. We agree with part of the first paragraph on the second page of this letter. We did, in fact, have many meetings and telephone conversations with all representatives concerned. I have not seen the "several letters" which you mention; but I would argue with the last sentence in this paragraph: the Rice Multi-Phone *is* compatible with your four-conductor, female jack and the Multi-Phone *is* compatible with the telecommunications network of switching and signaling offices—Universally Compatible! This has been proven time and time again through my use of the device and through over seven years of testing, under all kinds of circumstances and conditions (tests made by Rice International Corporation and at least one independent telephone company). According to the August 1, 1972 Telephone Engineer & Management magazine, the FCC states: "The practices and policies of AT&T in furnishing connecting arrangements for customer-provided equipment are at variance with its tariff language on the subject". (A photocopy of the article is enclosed.) I certainly agree with that statement.

Mr. Williams, let's resolve this situation without my having to resort to legal action, Thank you very much.

Sincerely,

F. D. JORDAN.

Exhibit 31

SOUTHERN BELL,
Coral Gables, Fla., November 9, 1972.

Mr. F. D. JORDAN,
*Dispatch Services, Inc.
 Miami, Fla.*

DEAR MR. JORDAN: Subject to your letter dated October 3, 1972, we have reviewed our position with the responsible people in our Company to be sure of what our present position is. We must make reference to our letter dated July 25, 1972, and state that this same procedure still exists.

We encourage you not to use the equipment in question until a definite agree-

ment is reached between you and our Company concerning a connecting arrangement.

We can appreciate your interest in pursuing this matter, and we look forward to having news which would satisfy your requirement, in the near future.

As I stated in my telephone conversation with you on November 9, 1972, you will be advised as soon as further information is available that would have a significant bearing concerning the equipment which you want to connect to our lines.

Yours very truly,

B. D. WILLIAMS,
District Marketing Manager.

Exhibit 32

KENDALL, FLA., May 26, 1972.

PHIL SUTTON,
*Marketing Office
Southern Bell Tel. and Tel. Co.,
Homestead, Fla.*

SIRS: In September, 1971, I requested the installation, in my office, of two lines (central office rotary) using two (2) four (4) prong plug jacks as terminals with a ringer on the line. As indicated at that time, I intended to use Rice multi-phones in my office. The request for this installation was refused.

This letter was followed by another in November renewing the request and a copy was sent to the Florida Public Service Commission.

On April 1, 1972, I received a letter from the Fla. P.S.C., signed by James G. Parks of the P.S.C. Rate Department, stating that a "special assembly arrangement" (interconnect) was available for use with this instrument.

I sent a copy of this letter to Mr. Phil Sutton of the Homestead Marketing Office of Southern Bell and again renewed the request for the above mentioned installation. I was informed that it would be 30 days before such installation could be made.

The 30 day period is more than past and I am again requesting that this installation be made. If this is again denied, I have no alternative but to instruct my attorney to take legal action against the Southern Bell Co. At the same time I intend to inform the Miami Herald and the Miami News of our action.

Respectfully,

RICHARD L. PUTMAN.

Exhibit 33

FLORIDA PUBLIC SERVICE COMMISSION,
Tallahassee, March 31, 1972.

Dr. R. L. PUTMAN,
Miami, Fla.

DEAR DR. PUTMAN: This has further reference to the problem of whether an interconnecting device is needed between lines provided by the telephone company and facilities provided by a customer such as the Rice Conference and Rerouter Telephone.

To this point in time any equipment provided by a subscriber may be interconnected with any telephone line only through a proper protective interconnect arrangement. This is a rule sanctioned by the Federal Communication Commission and followed by all telephone companies which provide any interstate services. Such rule has been approved by this Commission for intrastate services and is reflected in the telephone companies tariffs.

It is our understanding that a new interconnecting arrangement for this type of instrument is presently being developed and should be available within the next few months. However, in the meantime, a special assembly arrangement is available if such instrument must be used. If the instrument is attached without any such device the telephone company is required to demand the removal of the facility and to suspend service if its use is continued without the addition of the interconnect unit.

If you have any additional questions in this matter we will do our best to answer them.

Very truly yours,

JAMES G. PARKS,
Rate Department,

Exhibit 34

SOUTHERN BELL,
Miami, Fla., June 12, 1972.

RICHARD L. PUTMAN, D.D.S.,
Kendall, Fla.

DEAR DR. PUTMAN: During our telephone conversation of June 8, 1972, regarding your letter dated May 26, 1972, you requested a written reply as to our Company's position in refusing to connect our lines to your equipment (Conference and Re-Router Phone) supplied by Rice International Corporation Electronics.

Southern Bell's interconnection procedure for the provision of voice connecting arrangements is implemented when the customer places his order. Orders for voice connecting arrangements should be placed by the customer using the desired arrangement (USOC/Equipment) designation. If the customer does not know what arrangement to order he should be referred to his equipment supplier for the proper arrangement. It is the Telephone Company's position that the customer must arrange for the design, engineering, installation and maintenance of his equipment and that the Bell System will provide the type interconnection arrangement specified by the customer. This is for the customer's protection as well as the Telephone Company's. We (Southern Bell) do not know the technical details of the various manufacturers' equipment, nor with which of the connecting or access arrangements it is compatible.

Customers requesting detailed technical information regarding a voice connecting arrangement should be referred to the appropriate technical reference.

As a result of this procedure, many meetings have taken place with representatives of Rice International Corporation Electronics, American Telephone and Telegraph Company, and our Company. Several letters have been written by all concerned trying to satisfy customer requests like yours for using this equipment. Presently, this manufacturer's equipment is not compatible to any voice connecting arrangement that is available.

Serious consideration was given to the CEZ voice connecting interface device, as this device would require the least amount of modification by the manufacturer of the equipment you desire to use. Because of the modification requirements by the supplier and the applicable rate of \$50.00 connection charge and \$2.15 monthly charge, this device was not acceptable.

American Telephone and Telegraph Company has been working on the design of a new voice connecting interface device called an STP, but it will not be tested and priced out until January 1973 or later.

The special assembly arrangement mentioned in the letter dated March 31, 1972, from the Public Service Commission is possible. The time interval in processing a special assembly arrangement and the charges that would be applicable usually discourages the customer's acceptance.

We have discussed your request with our Area Attorney and he has suggested that your attorney contact him, at his convenience, for a more detailed explanation as to why we cannot, at this time, honor your request for connecting Southern Bell Telephone and Telegraph lines to your equipment. Our Area Attorney is Mr. M. T. Walsh and is located at 330 Biscayne Boulevard, Room 301, Miami, Florida, telephone number 305 350-8046.

Yours very truly,

B. D. WILLIAMS,
District Marketing Manager.

Exhibit 35

KENDALL, FLA., June 21, 1972.

Mr. B. D. WILLIAMS,
Southern Bell,
Miami, Fla.

DEAR MR. WILLIAMS: Re your letter of June 12, 1972:

It is my understanding that this letter was cleared thru Southern Bell's legal office hence I can understand its content. The letter is merely a rehash of numerous things discussed verbally by phone. It does not deal with the existing problem.

In paragraph two of your letter you state that "if the customer does not know what arrangement to order, he should be referred to his equipment sup-

plier for the proper arrangement". Mr. Williams, I *do* know what arrangement to order and have done so on several occasions beginning September, 1971. The order has been made verbally and in writing as I am sure you are aware. All that is needed is a four (4) prong plug jack with a ringer on the line. You and I both know that there is no way in which this instrument (the Rice Multi-phone) can harm the communications network. In view of the Carter decision this should not be a problem.

To add further impetus to my request, as you know, two previous installations have been made by *Southern Bell* of an identical arrangement as that that I have requested. These installations were made at the offices of Dispatch Services, Inc., Miami International Airport, and at 8301 S.W. 112 St., Miami. These instruments have been in service approximately two (2) years and have caused no interference with the communications network.

The above mentioned installations were referred to in my letter of November 1971. At that time I was informed by Southern Bell that they were installed for demonstration purposes *only*. Mr. Foy Jordan, of District Services, Inc., gives me a different version. He says that there was never any mention of any *demonstration only* stipulation and that they were intended to be used for normal business and residential communications and have been so used. He is prepared to make a statement to this effect.

My point is this: that by refusing my request for a like installation, Southern Bell is in direct violation of the established tariff regulations. Unless Southern Bell can obtain, in writing, a statement from Mr. Jordan to back their claim of the reasons for the above mentioned installations I must request that my attorney proceed with litigation as indicated in my letter of May 25, 1972 to Southern Bell marketing office.

In your letter of June 12, 1972 you requested that my attorney contact the Southern Bell Area Attorney, Mr. M. T. Walsh, for a more detailed explanation of Southern Bell's refusal to honor my request. For the above outlined reasons, I can see no advantage of such a meeting at the present time. The situation seems pretty clear cut in that Southern Bell is refusing to honor my request for a service which it has provided another subscriber.

I would appreciate your immediate attention to this matter.

Respectfully,

RICHARD L. PUTMAN.

Exhibit 36

SOUTHERN BELL,

Coral Gables, Fla., November 10, 1972.

RICHARD L. PUTMAN, D.D.S.,
Kendall, Fla.

DEAR MR. PUTMAN: During our telephone conversation on November 9, 1972, we discussed our Company's position in reference to the connecting arrangement procedure for equipment you have requested to connect to our lines. As I stated, our position is the same as was stated to you in my letter dated June 12, 1972.

We encourage you not to use the equipment in question until a definite agreement is reached between you and our Company concerning a connecting arrangement.

We can appreciate your interest in pursuing this matter, and we look forward to having news which will satisfy your requirement, in the near future.

You will be advised as soon as further information is available.

Yours very truly,

B. D. WILLIAMS,

District Marketing Manager.

AMERICAN TELEPHONE & TELEGRAPH Co.,
New York, N.Y., October 30, 1972.

Mr. KELLEY E. GRIFFITH,
Chief, Domestic Rates Division,
Common Carrier Bureau,
Federal Communications Commission,
Washington, D.C.

DEAR MR. GRIFFITH: This is in reply to your letter dated September 26, 1972, reference 9310, which enclosed a September 15, 1972 letter from Mr. Charles Rice, President of Rice International Corporation. Mr. Rice indicated that he

felt our previous reply did not satisfy his complaint and alleges that we are deliberately delaying the availability of a connecting arrangement for use with his MULTI-PHONE product.

Mr. Rice's allegation that we are deliberately delaying development of an interface device which could be used with his equipment is completely untrue. We have always followed a policy of full cooperation with manufacturers and have supplied them with information which would enable them to design their equipment so as to be compatible with an appropriate connecting arrangement. Mr. Rice has been and will continue to be afforded our same full cooperation.

In the past, Mr. Rice has unsuccessfully attempted to utilize his product with two existing types of connecting arrangements with which his product was apparently incompatible. Since he is either unwilling or unable to appropriately modify his product interface to match that of existing connecting arrangements we subsequently took his requirements along with similar requirements from other manufacturers to enable development of a connecting arrangement with which compatibility hopefully will be achieved by Mr. Rice's device. Hence, Mr. Rice is one of many manufacturers who will be able to use this connecting arrangement. This results in a more economical connecting arrangement for all concerned than would otherwise be available if a multiplicity of connecting arrangements were developed for essentially the same interface configuration.

It must be recognized that the development of a new connecting arrangement generally involves a minimum interval of one year. The aforementioned connecting arrangement will be applicable to both voice and data transmission. Being more complicated, the development time for this connecting arrangement exceeds that which is required where only one capability is provided. As indicated in my previous letter, the Technical Reference for this new connecting arrangement will be provided to Rice International Corporation as soon as it becomes available. We are continuing to press strongly for availability of the connecting arrangement in mid-1973.

We trust this will provide you with the desired information.

Very truly yours,

T. W. SCANDLYN.

FEDERAL COMMUNICATIONS COMMISSION,
Washington, D.C., November 14, 1972.

CHARLES F. RICE,
Rice International Corp.,
Miami, Fla.

DEAR MR. RICE: This is in reference to our previous correspondence concerning your complaint that the Bell System is deliberately delaying the introduction of a connecting arrangement for use with your company's Multi-Phone device. We have received a reply from the telephone company in response to the inquiry which was made on your behalf. A copy of the company's letter of October 30, 1972 is enclosed for your information.

It is noted the company states that it is not deliberately delaying development of an interface device for use with your company's equipment.

If you wish to pursue this matter further, you are entitled to file a formal complaint with this Commission. Such formal complaints must be filed in accordance with Sections 1.721 through 1.735 of the Commission's Rules, copies of which are enclosed.

Sincerely yours,

KELLEY E. GRIFFITH,
Chief, Domestic Rates Division,
for Chief, Common Carrier Bureau.

Enclosures :

MAY 11, 1972.

Hon. WILLIAM T. MAYO,
Commissioner,
Public Service Commission,
State of Florida,
Tallahassee, Fla.

(Attention: Director, Legal Department)

DEAR SIR: Commissioner Mayo asked that we send copies of the enclosed Briefs and Testimony in *Phonetele, Inc. vs. General Telephone of California and Pacific Telephone of California*.

We have had one, informal meeting with Chairman Yarborough, Commissioners Mayo & Bovis, concerning our right to tie-in to the telecommunications network to provide a service (not now available) to the telephone subscriber in the State of Florida.

We believe that the enclosed documents clearly show that the State of California is moving in the direction of causing a certification program (for foreign attachments) to be established in their State.

We are hopeful that the Florida Public Service Commission will see fit to move in a similar direction.

It is my understanding that Commissioner Mayo is going to ask for an opinion from you, thus my reason for mailing this information to you at his request.

Thank you very much.

Most sincerely,

CHARLES F. RICE, *President.*

NOVEMBER 11, 1972.

President RICHARD M. NIXON,
Washington, D.C.

DEAR MR. PRESIDENT: Congratulations on your very recent victory!!

In your campaign, you appealed for our help in seeking re-election, and you can be assured that it was given. Now, we are appealing to you for help in correcting a situation within the Federal government which we feel is terribly wrong.

It is impossible in a brief letter to give you a complete history of our case; hence, we, the undersigned, are seeking a few minutes of your time in which to personally explain the untenable situation in which we find ourselves.

Let me explain briefly:

Rice International Corporation (a Florida corporation) was incorporated on June 15, 1970. It seeks to provide, through patented circuitry, several services to the subscriber which are not now available within the telecommunications industry.

Under present tariffs, our instruments cannot be wired directly into the telecommunications network without a protective interconnect device, *but*, the law says that this instrument, if required, must be provided by the telecommunications companies: namely, AT&T and the Bell System. This they refuse to do.

We have sought relief through petition to the F.C.C. We have personally met with the F.C.C. in Washington, and have been informed that they are unable to bring enough pressure to bear to force AT&T and the Bell System to comply with the law. An appointment was arranged for us, by the F.C.C., to meet with the F.T.C. because, in the opinion of the F.C.C., we had a very sound case of restraint of trade involving millions of dollars.

After meeting with the F.T.C., in which our case was briefly reviewed, the F.T.C. recommended that our case be taken to the Justice Department and they arranged the meeting. Here again, our case was briefly reviewed, and they asked that they be supplied with copies of all documents pertaining to our case and that it would be investigated. However, it was pointed out that the Justice Department *rarely* interferes in F.C.C. matters. In other words, we are getting the "Washington Shuffle". All the aforementioned points and many others are documented. We are asking for a chance to present it.

Various communications instruments are being sold presently throughout the United States and are being illegally wired into the communications network. We, however, have tried to work within the industry and have refrained from making any sales to private individuals, although a vast market exists. It might be of interest to note that your own White House Communications office has made inquiry concerning our instruments.

Mr. President, we believe you to be a fair man and, as an attorney, I am sure you can appreciate our situation. We have limited resources and the corporation will soon be faced with one of two alternatives, either:

1. Sell the instruments to the subscriber, and wire them into the communications network illegally or,
2. Face financial disaster.

In capsule form, it boils down to this. The F.C.C., the Federal bureau charged with regulating this industry, is being told by AT&T what they will and will not do, and the F.C.C. seems powerless to act. This is not *right*, and we need your help in correcting it.

We are aware that the pressures of governmental business are enormous and that your schedule is tight. By comparison, our problems may seem small, but this is no trivial matter where private industry is concerned.

May we please, Mr. President, speak with you at your earliest possible convenience?

Respectfully,

CHARLES F. RICE,
President.
RICHARD L. PUTMAN,
Executive Vice President.

OFFICE OF TELECOMMUNICATIONS POLICY,
EXECUTIVE OFFICE OF THE PRESIDENT,
Washington, D.C., December 18, 1972.

Mr. CHARLES F. RICE,
President,
Rice International Corp.
Miami, Fla.

DEAR MR. RICE: The President has asked me to thank you for your letter regarding your difficulties with respect to existing telephone company interconnection tariffs.

As you know, the question of "reasonable" interconnection restrictions, network protection, and equipment performance criteria presently is being considered by the Federal Communications Commission. We are working with the FCC to achieve a prompt and satisfactory resolution of these issues.

Recently the FCC issued a staff report proposing a registration procedure for FCC-authorization of customer-owned and maintained equipment which is directly connected to the switched telephone network. I am forwarding a copy under separate cover and would appreciate any comments on it which you may have.

I appreciate your taking the time to write to us of your concerns, and your support for the Administration.

Sincerely,

CLAY T. WHITEHEAD.

RICE INTERNATIONAL CORP.,
Miami, Fla., January 11, 1973.

Mr. CLAY T. WHITEHEAD,
Office of Telecommunication Policy,
Executive Office of the President,
Washington, D.C.

DEAR MR. WHITEHEAD: Thank you for your letter of December 18, 1972 and the Technical report #T-7202.

We at Rice International feel that the proposals set forth in this report are a sensible approach to the solution of present problems faced by the interconnect industry.

However, Mr. Whitehead, following receipt of your correspondence we were informed by the FCC in Washington that, "this report was merely a *proposal* based on the opinion of the office of the chief engineer only, and did not reflect the thinking of the full FCC staff. At a full staff meeting this report would be placed in the hopper along with all other inputs from many sources and would carry no more weight than any other report."

This brings us back to our original request for a meeting with President Nixon. We would still like such an audience in order that we might bring to light the negative results that have been achieved by three years of trying to work within the system.

We would like very much to see a certification program established, but in lieu of this we will install our equipment with an interface which the existing tariffs say are to be furnished and maintained by the telecommunications companies. AT&T and the Bell System refuse to supply us with their interface even though it has been over two years since our original request.

This flagrant violation of the tariffs has resulted in the restraint of trade of Rice International Corporation.

We have had voluminous correspondence with the FCC and also the Department of Justice in an attempt to obtain some relief. Following a meeting with Mr. Samuel Gordon of the Justice Department we forwarded to him documentation of all our efforts under the apparently mistaken impression that the Justice Department would in some manner help our cause.

Finally, we can best summarize the present situation of Rice International Corporation by the following :

- (a) AT&T has under the existing tariffs the right to an interface.
- (b) These tariffs state explicitly that such interface devices are to be "furnished" by AT&T.
- (c) Rice International must, in order to comply with the law be supplied with an interface by AT&T.
- (d) AT&T has failed to comply with the requirements of the aforementioned tariffs which they themselves have drafted by their failure to supply said interface for a period in excess of two years, and therefore are in direct violation of the law.
- (e) Rice International withheld their products from the public marketplace in compliance with said laws.
- (f) That is, Rice International has been and continues to be restrained from trade as a direct result of its desire to obey the law and the refusal of AT&T to do so.

We add parenthetically that we are not concerned here with the intentions of AT&T but rather with those actions or failures to act within the spirit and letter of the law, which have restrained our trade within the Bell System.

Under separate cover we are sending you copies of all documents presently in the hands of both the FCC and the Justice Department.

Frankly, Mr. Whitehead, we need guidance in what moves we can and should make in order to bring about an immediate resolution of our problems. As I said in my original letter to President Nixon, we have faith in our system and are trying to work within it. There must be some department or individual who can help a small Florida corporation fight a giant adversary when both common sense and the *law* indicate that our cause is just.

Respectfully,

CHARLES F. RICE, *President*,
U.S. SENATE,
December 18, 1972.

Mr. CHARLES F. RICE,
President, Rice International Corp.,
Miami, Fla.

DEAR CHARLES: My Administrative Assistant, Charles Canady, discussed with me his recent meeting with you and Dr. Richard Putman and I just wanted to take this opportunity to touch base with you.

In addition, I have read the material you left with Mr. Canady and it certainly appears that you have been getting the run-around. I found your device quite interesting and agree that there is a definite market-place for it.

As my staff indicated to you, I have written directly to Mr. Kelley E. Griffith, Chief, Domestic Rates Division of the Federal Communications Commission, requesting that he provide you with the direction needed to bring this matter to a swift conclusion. I hope to hear from him soon, and when I do, we'll be back in touch with you.

You mentioned that you had talked to Mr. Samuel Gordon, Assistant Chief of the Special Trial Section, Department of Justice, on this same matter, and you thought he would be helpful. Mr. John Currie of my staff, who sat in on your meeting in Lakeland, talked to Mr. Gordon today and I don't think we can expect too much support from him at this time. Mr. Gordon briefly explained that there was a question of primary jurisdiction in this case, and that it would probably be his recommendation to turn the matter over to the FCC. He said this wasn't an official Justice response because the file had not been completely studied, but he left little encouragement.

Please stay in touch. I hope we can be of some help to you because I know what you must be going through after all of this time.

Sincerely,

LAWTON CHILES

U.S. SENATE,
January 19, 1973.

Mr. CHARLES F. RICE,
*President, Rice International Corp.,
Miami, Fla.*

DEAR CHARLES: John Currie discussed with me his telephone conversation with you and Dr. Putnam earlier this week about the Federal Communication Commission's decision to require a formal complaint from you before they can proceed further. This was indeed bad news, and I have fully briefed the Senator on what transpired.

Enclosed is a copy of the letter from the FCC explaining this action. It's a rather bad copy and as soon as the original letter from Mr. Eger arrives, I'll forward it directly to you.

If the FCC was stalling for time, and there is every indication they were, they certainly succeeded. Unfortunately, this was at your expense and I can well understand your feeling that the FCC has failed to exercise its proper role. Senator Chiles will give you full cooperation in trying to expedite a formal complaint through the Agency, but as Mr. Currie advised you, there is no way getting around the fact that this is a time-consuming procedure. In all of our minds, it's a shame there is no other way out.

Keep us advised from your end on what your plans are, and again, we'll help as best able.

With kindest regards, I am

Sincerely,

CHARLES CANADY,
*Administrative Assistant to
Senator Lawton Chiles.*

FEDERAL COMMUNICATIONS COMMISSION,
Washington, D.C., January 18, 1973.

Hon. LAWTON CHILES,
*U.S. Senate,
Washington, D.C.*

DEAR SENATOR CHILES: This is in response to your letter of December 20, 1972, concerning the complaint of Rice International Corporation against the American Telephone and Telegraph Company (AT&T). The complaint concerns the alleged deliberate delay by AT&T in producing a connecting arrangement which would permit connection of Rice's Multi-Phone device to telephone company facilities.

By letter of October 30, 1972 AT&T has denied that the delay is deliberate and alleges that a suitable connecting arrangement will be developed within a reasonable period of time, considering the circumstances. The rules of this Commission provide that where a telephone company states that it refuses or is unable to satisfy an informal complaint, such as was filed by Rice, the complainant may then file a formal complaint with the Commission. Rice International has been advised of this by our letter of November 14, 1972 and a copy of the appropriate rules governing such complaints was enclosed with that letter. Except for the filing of such a formal complaint, there is no other procedure which we can recommend to Rice for resolution of the matter by this Commission. This does not preclude Rice from seeking court action.

It should be noted that our referral of Mr. Rice to the Federal Trade Commission (FTC) was for the sole purpose of informing that agency of his complaint concerning the advertising and marketing practice of other companies in the interconnection business. While many of these companies encourage their customers to connect equipment directly to the telephone network without the connecting arrangements required by the tariffs, whether such encouragement might constitute misleading advertising or an unfair trade practice is a question within the expertise of the FTC. We did not imply that the FTC should or would consider the basic complaint concerning the delay in provision of the connecting arrangement.

We hope the foregoing will be of assistance to you. Copies of the correspondence mentioned above are enclosed.

Sincerely,

JOHN M. EGER,
Legal Assistant to the Chairman.

Enclosures:

FEDERAL COMMUNICATIONS COMMISSION,
Washington, D.C., February 1, 1973.

CHARLES F. RICE,
President,
Rice International Corp.
Miami, Fla.

DEAR MR. RICE: This is in reference to our previous correspondence concerning your complaint that the telephone company has deliberately delayed the provision of a connecting arrangement for use with your company's device known as the Multi-Phone. In your December 26, 1972 letter on this matter, you have asked that we review the correspondence pertaining to your complaint and advise you how you can pursue this matter further with this Commission.

The American Telephone and Telegraph Company has denied in its letter of October 30, 1972, that it has deliberately delayed development of an interface device which could be used with your company's device. The rules of this Commission provide that where a telephone company states that it refuses or is unable to satisfy an informal complaint, such as the complaint filed by your company, the complainant may then file a formal complaint with the Commission. You have been advised of this by our letter of November 14, 1972 and a copy of the appropriate rules governing such complaints was enclosed with that letter. Except for the filing of such a formal complaint, there is no other procedure which we can recommend for resolution of the matter by this Commission. This does not preclude your company from seeking court action.

It is hoped that you will find the foregoing responsive to your December 26, 1972 inquiry into this matter.

Sincerely yours,

KELLEY E. GRIFFITH,
Chief, Domestic Rates Division,
for Chief, Common Carrier Bureau.

CONGRESS OF THE UNITED STATES,
HOUSE OF REPRESENTATIVES,
Washington, D.C., February 12, 1973.

Dr. RICHARD PUTMAN,
Rice International Corp.,
Miami, Fla.

DEAR DR. PUTMAN: I enjoyed talking with you on Friday, and have today received the material you sent. It certainly does appear that you have a legitimate case and I want to do whatever I can to be of assistance.

I have already been in contact with Senator Chiles' office and have told them of my willingness to work with them in your behalf. They have advised me that you have already engaged counsel to represent you with the FCC, and this seems to be the best course of action at this point.

I appreciate your bringing this situation to my attention. Please be assured of my continued interest.

Sincerely,

DANTE B. FASCELL,
Member of Congress.

MARCH 7, 1973.

THOMAS W. SCANDLYN,
Assistant Vice President,
American Telephone & Telegraph Co.,
New York, N.Y.

DEAR MR. SCANDLYN: Since you were unable to meet with us while we were in New York, this letter is to confirm our telephone conversation of Friday March 2, 1973 between you, one of your engineers, Dr. R. L. Putman and myself.

As was pointed out in our conversation, we have been trying to get an interface from AT&T for something over 2½ years. As per our conversation, you are now prepared to give Rice International Corporation a letter specifying the exact date on which we will be furnished the required two line interface. You said that the date to be designated was May 1, 1973 and that the letter would be mailed within three days of our conversation.

I wish to thank you for your time and courtesy and to state that we, Rice International Corporation, are eagerly awaiting the receipt of this letter.

Respectfully,

CHARLES F. RICE, *President.*

AMERICAN TELEPHONE & TELEGRAPH Co.,
New York, N.Y., March 16, 1973.

Mr. CHARLES F. RICE,
Rice International Corp.,
Miami, Fla.

DEAR MR. RICE: Regarding your phone conversation with us on March 2, we wish to advise you that a Technical Reference is expected to be available in May describing the connecting arrangement for use with key systems such as yours. Product availability is scheduled by July. We will provide you with a copy of the Technical Reference for the arrangement as soon as it is available.

You also inquired about status of the attestation program for conferencing devices. We fully expect the Technical Reference to be available this month along with the announcement of the related proposed tariff filing. We will also send you a copy of this reference when it is issued.

Sincerely,

W. SCHIAVONI.

RICE INTERNATIONAL CORP.,
Miami, Fla., March 22, 1973.

THOMAS W. SCANDLYN,
Assistant Vice President,
American Telephone & Telegraph,
New York, N.Y.

DEAR MR. SCANDLYN: On March 7, 1973, Mr. Charles Rice wrote to you regarding our conversation of March 2, 1973, between you, Mr. W. Schiavoni, Mr. Rice and myself.

At that time you agreed to give us a letter specifying the exact date (May 1, 1973) on which we would be furnished a two line interface for use with the Rice Multiphone. This letter was to come from you as an officer of AT&T. To date it has not been received.

We are in receipt of a letter dated March 16, 1973, from Mr. W. Schiavoni in which it is stated that a "Technical Reference" is "expected" to be available in May with "product availability scheduled by July." In the past, we have been promised this interface as far back as May 4, 1971.

We have had voluminous correspondence with the FCC in an attempt to obtain some relief from the untenable situation in which we at Rice International find ourselves.

We can best summarize the present situation of Rice International Corporation by the following:

- (a) AT&T has under the existing tariffs the right to an interface.
- (b) These tariffs state explicitly that such interface devices are to be "furnished" by AT&T.
- (c) Rice International must, in order to comply with the law, be supplied with an interface by AT&T.
- (d) AT&T has failed to comply with the requirements of the aforementioned tariffs which they themselves have drafted by their failure to supply said interface for a period in excess of 2½ years, and therefore are in direct violation of the law.
- (e) Rice International withheld their products from the public marketplace in compliance with the laws.
- (f) That is, Rice International has been and continues to be restrained from trade as a direct result of its desire to obey the law and the refusal of AT&T to do so.

We add parenthetically that we are not concerned here with the "expectations" of AT&T, but rather with the actions of AT&T. In our conversation with you, Mr. Scandlyn, on March 2, 1973, we asked for a specific date on which we would be supplied with the required interface and you set May 1, 1973, and agreed to give us a letter to this effect, signed by you as an officer of AT&T.

May we please have this letter over your signature as promised.

Sincerely,

R. L. PUTMAN,
Executive Vice President.

RICE INTERNATIONAL CORP.,
Miami, Fla., May 24, 1973.

Mr. T. W. SCANDLYN,
Assistant Vice President,
A.T. & T.,
New York, N.Y.

DEAR MR. SCANDLYN: In reference to your letter, to me, of May 2nd, 1973: First, please allow me to apologize for my reference to your alleged position as an Officer of AT&T.

In our telephone conversation of March 2nd, 1973, in which you voluntarily set May 1st, 1973 as the date on which we could expect to be furnished an interface device to be used with our Rice MULTI-PHONE, we asked that this information be set in writing and signed by an officer of AT&T. Your reply was, and I quote, "at this point in time, I cannot see any reason why that can't be done". You went on to say that the letter would be gotten out the first part of the following week. In view of this conversation we assumed that as an Assistant Vice President that you were an officer of AT&T. You are correct that you did not represent yourself, to us, as an officer so again, please, accept my apologies.

Since receipt of your letter we have been in communication with Mr. B. D. Williams, District Marketing Manager, Southern Bell, here in Miami. He has, through Southern Bell's Atlanta Office, been informed that the interface has been designated the STP. Neither Mr. Williams nor anyone at our office have been able to get the information on the proposed tariff, installation costs and per line charge on said interface. We can see no reason why this information can't be divulged to Rice International at this time so that we may begin preparing our program for marketing the Rice MULTI-PHONE.

As to the statements in your May 2nd, 1973 correspondence and while we do appreciate your newly initiated efforts in our behalf, to keep us abreast of various aspects of the interface (under development for the Rice MULTI-PHONE, by AT&T) we must point out that our interest in the technical details of this equipment is at most, academic. Under paragraph B4 of Section 34 of Southern Bell's General Exchange Tariff, on file with the Florida Public Service Commission and, furthermore the Interstate Tariff, FCC #263, on file with the Federal Communications Commission, it is clearly the responsibility of AT&T and the Bell System to "furnish and maintain" said interface. Issuance of the Technical Reference EL 2317 is, in no way, pertinent to our present discussions.

Rice International's interest in the aforementioned interface device extends *no further* than the time and date of delivery of the interface device and the details as to the amount of tariff, the installation charges and the line charges.

Since we first requested an interface from Southern Bell and AT&T in *February, 1971*, surely you can understand our frustrations over the continuing delays. We need the information requested because of its effects on our plans for marketing, but as to the actual interface device, we expect to be provided with a device, with appropriately marked terminals for connection and use with the Rice MULTI-PHONE. The function of said interface is solely the problem of AT&T and the Bell System.

Please, just provide the interface.

Thank you very much.

Sincerely,

RICHARD L. PUTMAN, DDS.
Executive Vice President.

AMERICAN TELEPHONE & TELEGRAPH CO.,
New York, N.Y., May 2, 1973.

Mr. R. L. PUTMAN,
Executive Vice President,
Rice International Corp.,
Miami, Fla.

DEAR MR. PUTMAN: I apologize most sincerely for the late response to your March 24, 1973 letter. Somehow during my frequent absences on other business, the letter was inadvertently misplaced.

Apparently, there is some misunderstanding on the substance of our March 2, 1973 telephone conversation. According to your most recent letter, it is alleged that "In our conversation with you, Mr. Scandlyn, on March 2, 1973, we asked

for a specific date on which we would be supplied with the required interface * and you set May 1, 1973, and agreed to give us a letter to this effect, signed by you as an officer of AT&T.' To the best of my recollection, and that of Mr. Schiavoni's, I made no such commitments—that is, for me to send you a letter and that May 1, 1973 would be the product availability date. And, furthermore, I did not represent myself to be an officer of AT&T which, of course, I am not.

As best can be determined by Mr. Schiavoni at this time, and he is the person responsible for such matters, his March 16, 1973 letter to Mr. Rice fairly stated our expectations for the availability of both the Technical Reference material and the connecting arrangement. His letter, I believe, met our commitment to Mr. Rice since exact dates just are not ascertainable. However, Mr. Schiavoni reconfirms that distribution of the Technical Reference to you and other interested manufacturers is scheduled for the last week in May and that the product is scheduled for availability by July.

Very truly yours,

T. W. SCANDLYN.

AMERICAN TELEPHONE & TELEGRAPH CO.,
New York, N.Y., June 21, 1973.

Dr. RICHARD L. PUTMAN,
Executive Vice President,
Rice International Corp.,
Miami, Fla.

DEAR DR. PUTMAN: In reply to your letter of May 24, 1973 regarding the voice connecting arrangement which can be used with your Rice Multi-Phone, it looks to me that the whole matter will be cleared up in a few weeks.

You now should have the Technical Reference STP (PUB 42212) applicable generally for connecting arrangements of multi-line terminal devices. This reference was forwarded to Mr. Rice on May 25, 1973. I understand further conversations were held with Mr. Schiavoni's people on that same day.

You have asked when delivery of the interface device can be made. The device is available now and can be delivered in a short period of time. You have also asked about the tariff and associated charges. Work on these items is being done now and will be available by June 29, 1973. The monthly charge which we will suggest to our Associated Companies is expected to be \$5.25. The suggested installation charge will be \$30.00. Please understand, however, these are tentative figures since the final amounts will depend on each Associated Company's review of their own requirements and on appropriate regulatory body action when the tariffs are filed in each state.

If you have any further questions, please call Mr. B. D. Williams in Coral Gables, telephone 305-350-8514.

Very truly yours,

T. W. SCANDLYN.

RICE INTERNATIONAL CORP.,
Miami, Fla., June 28, 1973.

Mr. T. W. SCANDLYN,
Assistant Vice President,
A.T. & T.,
New York, N.Y.

DEAR MR. SCANDLYN: I have read your letter of June 21st, 1973, addressed to Richard L. Putman, Rice International's Executive Vice President.

We acknowledge receipt of the Technical Reference Manual (PUB 42212) on the STP interface, mentioned in your letter.

The interface device (STP) was installed in our offices, by Southern Bell, on Friday, June 15th, 1973.

The STP does not work with the Rice Mult-Phone. This fact is acknowledged by some 6 or 7 of Southern Bell's representatives, here in Miami.

We conclude, at this juncture, that since AT&T has again failed to meet their acknowledged commitment to provide and maintain an interface that the only reasonable course of action at this time is for AT&T to default their option to require an interface until such time as a suitable device is forthcoming. Or, until such time as certification of telephone equipment, such as ours, has become the standard practice.

* Stated earlier in the March 24, 1973 letter as "a two line interface for use with the Rice Multi-Phone."

This is predicated on a number of pertinent points:

(a) Rice International has deliberately withheld its products from the telecommunications market (for over two years) based upon the assurances and time-tables provided by AT&T.

(b) Southern Bell, here in Miami, has installed two Rice Multi-Phones which operated for in excess of two years *without* an interface (i.e., hardwired direct to the Bell network by Bell employees) and, this was done without incident or harm to the network.

(c) AT&T is clearly unable to provide the equipment necessary within their own timeframe.

(d) An interface is not a requirement under the law, but rather an option which may be exercised by AT&T (and the Bell System) to protect their network.

(e) Such an option may only reasonably be exercised when it is within the capability of AT&T to provide such a device and may not reasonably be implemented to deny free enterprise access to the telecommunications industry.

Since both AT&T and Rice International Corporation have now exhausted all possibilities regarding these matters, we see no further reason for delay of any kind and look forward to an immediate reply.

Thank you very much.

Most sincerely,

FRITZ GIBSON, JR.,

Chairman of the Board of Directors.

RICE INTERNATIONAL CORP.,

Miami, Fla., June 28, 1973.

HON. WILLIAM BEVIS,
*Chairman,
The State of Florida,
Public Service Commission,
Tallahassee, Fla.*

DEAR MR. CHAIRMAN: By now, you have probably received a copy of Fritz Gibson's letter to T. W. Scandlyn, Assistant Vice President of AT&T.

The much heralded STP interface device was installed in our offices on Friday, June 15th, 1973. This is the second interface installation by Bell . . . the first being done in February of 1971 . . . and, since the installation of the 2nd interface, Southern Bell has had 6 or 7 technical, engineering and marketing people out at our offices, trying to make the STP work. On Monday, June 25th, 1973, all of Bell's people agreed that the STP is not compatible with the Rice Multi-Phone.

We are now of the opinion that since nearly 3 years have elapsed since we first requested an interface from AT&T and since, after two feeble attempts to comply with our request have resulted in compromise after compromise, Rice International Corporation should be given some sort of immediate relief from the untenable position in which we find ourselves. AT&T has been given much more than ample time in which to perform. And, AT&T has failed, willfully or otherwise, to provide a compatible interface device.

Under paragraph B4 of Section 34, of Southern Bell's General Exchange Tariff, on file with the Florida PSC and the Interstate Tariff, FCC #263, on file with the Federal Communications Commission, it is clearly the responsibility of AT&T and the Bell System to "furnish and maintain" said interface device.

Since AT&T and the Bell System have been unable, or unwilling, to satisfy this requirement within a time-frame set by themselves, would it be unreasonable to suggest that such option be waived in the case of Rice International Corporation?

Mr. Chairman, what we now feel that we need, at this time, is a formal hearing before the State of Florida Public Service Commission.

We would appreciate your advice and guidance in whatever steps are necessary for us to accomplish same.

Thank you very much . . . we appreciate your continued interest in our problems.

Most sincerely,

CHARLES F. RICE, *President.*

RICE INTERNATIONAL CORP.,
Miami, Fla., July 5, 1973.

Mr. B. D. WILLIAMS,
District Marketing Manager,
Southern Bell,
Coral Gables, Fla.

DEAR MR. WILLIAMS: In this letter, I set forth a series of events in chronological order.

June 14th, 1973: Wendall Ford, Southern Bell Installation Foreman, visited our offices to acquaint himself with the Rice Multi-Phone so that he might better understand our requirements for installation of AT&T's new STP interface.

June 15th, 1973: Jim Edwards, one of SB's Installation Technicians, came to our offices to install the new STP. At the completion of the installation, on the same day, we discovered that the STP was not compatible with the Rice Multi-Phone.

June 19th, 1973: You, along with Don Herron, SB Marketing Manager; Jim Deegan, SB District Plant Manager; and, Earl Wagner, SB District Engineer, visited our offices to attempt to reach a solution to the problem of the STP's incompatibility with the Multi-Phone. You'll recall that this meeting lasted over one and one half hours and that the general conclusion, by all present, that since the STP was a new AT&T device, we should first determine that it (the STP) was properly connected.

June 20th, 1973: Jim Deegan arranged for W. D. Fassbinder, Earl Wagner and Wendall Ford to return to our offices on June 21st, 1973, to re-check all connections to see if anything could be done to make the STP compatible with the Rice Multi-Phone. As of today, the device has still not been made compatible and there is no way to make it so.

June 25th, 1973: The following were present, in our offices, from Southern Bell . . . Dick Lake, SB Communications Advisor; Jim Deegan, Earl Wagner, Wendall Ford and yourself. I represented Rice International, along with Dr. R. L. Putman, our Executive Vice President; Dr. Eddie Currie, our Vice President and Chief Engineer, and Dal Mohler, involved with our sales division.

In response to a previous request, made by me, you, along with the other Southern Bell representatives present, on June 25th, 1973, did confirm that the STP was properly installed and that the STP did not function in harmony with the Rice Multi-Phone. In addition, the statement was made that, "the solution to Rice's problem is no longer Southern Bell's but, now became AT&T's problem again" . . . the theory being that Southern Bell has done all it could to insure proper installation of the STP and all it (SB) could do to provide Rice with a working interface device. In other words, "it's back to the drawing boards" and, excuses for more delays.

The following are facts: (a) the STP interface IS NOT compatible with the Rice Multi-Phone. The electrical characteristics of the STP are clearly not compatible with the Multi-Phone. (This was noted by all the SB representatives who visited our offices.) (b) The STP is not even compatible with other Bell equipment, i.e., any lines which are to be used with customer owned equipment, may not employ any Bell equipment other than the STP interface. This means that any customer who desires to use his own equipment, in conjunction with the service provided by the Bell System, must either remove ALL Bell equipment or, request additional lines for the implementation of customer owned devices. It then follows that Bell's requirement for additional lines, for customer owned equipment, certainly violates the spirit (if not the letter) of the pertinent court decisions involving interconnection rights. And, we seriously doubt that there was NOT a time when Southern Bell and/or AT&T would have refused to install separate lines for the use of customer owned equipment. We also seriously doubt that Bell and/or AT&T have the right to design equipment and establish tariffs for a device to suit Bell's and AT&T's needs, rather than those of the customer. Southern Bell's stated policy of not permitting Bell equipment to work in harmony with customer owned equipment (behind an interface) fails to apply uniformly to all customer owned equipment. So, Rice International takes the position that it is, once again, being selectively discriminated against by the Bell System and by AT&T.

(c) We strongly suggest that either the interface which was to be compatible with the Multi-Phone does not exist. Or, the interface installed in our offices

by Southern Bell is not the much heralded STP. And, the latter is clearly not the case.

(d) Since an interface with data transmission capabilities has in fact, failed to materialize, it may be concluded that AT&T has—once again—failed to perform within their own expressly stated timeframe.

(e) The equipment used to house the interface (STP) is excessively expensive . . . excessively large, physically and excessively complicated to install. Witness the fact that approximately ten Southern Bell employees were involved in the installation.

(f) The Rice Multi-Phone has been working in the Miami Area for a number of years, with the full knowledge of Southern Bell. And, never during this period has there been the slightest suggestion that the Multi-Phone is in any way harmful, or even potentially harmful, to the Bell System Networks and/or associated equipment.

(g) PUB 42212 (the STP Technical Reference Manual) states that auxiliary power is available to provide for the event a customer experiences power failure. Bell informs us that providing standby power would be so expensive as to preclude the feasibility of offering this service to the customer. In the very likely event of a power failure, the customer who is "behind" the STP interface with his own equipment, would be completely without telephone service until power was restored by the power company.

Again, Mr. Williams, Rice International Corporation is being selectively discriminated against.

Under the aforementioned circumstances, we ask that AT&T and the Bell System waive their *option* to require an interface for use with the Rice Multi-Phone and allow us to get on with the marketing of our products.

Under paragraph B4, of Section 34, of Southern Bell's Exchange Tariff (on file with the Florida Public Service Commission) and, the Interstate Tariff, FCC, #263, on file with the Federal Communications Commission, it is clearly stated that it is the responsibility of AT&T and Southern Bell to "furnish and maintain" said interface.

After two attempts (over two years apart) you have failed. AT&T and the Bell System are either unable or unwilling to satisfy our requirements within AT&T's own set timeframe.

I'd be delighted to receive your comments concerning our feelings. Thank you!

Sincerely,

CHARLES F. RICE, *President*.

RICE INTERNATIONAL CORP.,
Miami, Fla., June 28, 1973.

MR. KELLEY E. GRIFFITH,
Chief, Domestic Rates Division,
The Federal Communications Commission,
Washington, D.C.

DEAR MR. GRIFFITH: It's been some time since we've corresponded. And, we're deluging you with letters. I assume that by now you've received a copy of Fritz Gibson's letter to T. W. Scandlyn, Assistant Vice President of AT&T.

Your files on us will reveal that ATA&T and Southern Bell installed an interface device for the Rice Multi-Phone (the first time) in February, 1971. This device did not work and was removed by Southern Bell.

This incident prompted us to contact the FCC and resulted in additional correspondence between your office, Mr. Scandlyn's office and Rice International. On October 30th, 1972, Mr. Scandlyn replied to a letter which you had written him and stated: (Page 2.) "It must be recognized that the development of a new connecting arrangement generally involves a minimum interval of one year. The aforementioned connecting arrangement will be applicable to both voice and data transmission."

On June 15th, 1973, the long awaited and much heralded STP interface device was installed in our Miami offices by Southern Bell. The installation, or Technical Reference Manual (PUB 42212), under Paragraph 1.2 states: "It (the STP) is not intended for data transmission."

Our position is as follows: AT&T and the Bell System have compromised us into waiting for this device as, to again quote Mr. Scandlyn, "Mr. Rice is one of the many manufacturers who will be able to use this connecting arrangement."

This results in a more economical connecting arrangement for all concerned . . ."

The STP does not work with the Rice Multi-Phone. So, this prompts two questions: 1.) Where is the interface Mr. Scandlyn made reference to in his letter to you of October 30th, 1972? (The STP is obviously not the same connecting arrangement.) And, 2.) When may Rice International Corporation expect relief from the untenable position it continues to find itself in?

At this point, I would appreciate your referring to the copy of Mr. Gibson's letter to Mr. Scandlyn. And, more particularly, from Paragraph #4 to the conclusion of his letter. Hopefully, these remaining paragraphs clearly give you our position (in Mr. Gibson's letter) and you can see the plight of Rice International.

Since nearly 3 years have elapsed since we first requested a connecting arrangement from AT&T and Southern Bell and since two attempts (by Bell & AT&T) to comply have failed and since, according to Interstate Tariff, FCC #263, it is clearly the responsibility of AT&T and the Bell System to "furnish and maintain" such a device, we feel that at this time a formal hearing before the FCC is in order. We would appreciate your advice and guidance in whatever steps are necessary for us to accomplish same.

For the record: On Monday, June 25th, 1973, some 6 or 7 representatives (technicians, engineers and marketing personnel) acknowledged the fact that the STP does not work with the Rice Multi-Phone. These representatives were from Southern Bell, here in Miami.

Mr. Griffith, we thank you once again and will look forward to hearing from you.

Most sincerely,

CHARLES F. RICE, *President.*

CONGRESS OF THE UNITED STATES,
HOUSE OF REPRESENTATIVES,
Washington, D.C., July 2, 1973.

MR. FRITZ GIBSON, JR.,
Chairman of the Board of Directors,
Rice International Corp.,
Miami, Fla.

DEAR MR. GIBSON: Thank you for sending me a copy of your letter to Mr. T. W. Scandlyn.

I have written to officials here in Washington concerning this matter. You may be assured that I will contact you as soon as I have the benefit of a response.

Again, thank you for contacting me.

Sincerely,

DANTE B. FASCELL,
Member of Congress.

U.S. SENATE,
July 6, 1973.

MR. CHARLES F. RICE,
President.
Rice International Corp.,
Miami, Fla.

DEAR CHARLES: John Currie of my staff in Lakeland told me of his recent telephone conversation with you and today I just finished reading copies of the correspondence you addressed to the Honorable William Bevice, Chairman of the Florida Public Service Commission and Mr. Kelley E. Griffith, Chief of the Domestic Rates Division of the Federal Communications Commission.

I can certainly understand your being upset over what has taken place, especially after you have received assurances the interface would work. In any case, I have contacted Chairman Bevis on your behalf and also I have made an inquiry to the FCC. As soon as I hear anything I will be back in touch with you. In the meantime if I can be of any further assistance, please let me know.

With warmest regards, I am

Sincerely,

LAWTON CHILES.

RICE INTERNATIONAL CORP.,
Miami, Fla., July 12, 1973.

The CHAIRMAN,
The Federal Communications Commission,
Washington, D.C.

DEAR SIR: Under Rules & Regulations of the Federal Communications Commission, Paragraph 1.718, "Unsatisfied informal complaints; formal complaints relating back to the filing dates of informal complaints," I have attached a Formal Complaint against AT&T and The Bell System.

This complaint was prepared by me and the Chairman of our Board of Directors, Fritz Gibson, Jr. Neither of us are Attorneys.

We respectfully request a Formal Hearing before the FCC, to seek immediate relief from the situation in which we, as a Corporation under the laws of Florida, find ourselves, i.e., we have been denied our rights to market our products, and the American Telephone subscribers have been denied a very useful and needed service.

We maintain that AT&T and The Bell System have willfully and purposely denied us our right to enter the market place by failing to provide us with an interface device compatible with the Rice Multi-Phone. (Brochures are enclosed.)

I have also enclosed Exhibits, marked "1" thru "10", substantiating our reasons for filing under 1.718.

Thank you very much, Sir.

Most sincerely,

CHARLES F. RICE, *President.*

Enclosures :

MULTI-PHONE,
Miami, Fla., July 16, 1973.

HON. ROBERT SHEVIN,
Attorney General,
The State of Florida,
Tallahassee, Fla.

DEAR MR. ATTORNEY GENERAL: We have requested a Formal hearing before the Florida Public Service Commission. We have asked for 30 to 45 minutes on the agenda at the meeting scheduled for August 14th, 1973, near Orlando. Our request has not yet been confirmed by Chairman Bevis, but we've been led to believe that a time slot will be made available for us, sometime during this regularly scheduled meeting. As you are no doubt aware, one of the main items on the agenda is Bell's request for a 30 million dollar plus, rate hike.

We wanted to briefly acquaint you with our plight, hoping that your office might possibly lend its assistance in some manner. Very honestly, I'm not sure that you can. But, nevertheless, I'm aware of your efforts on behalf of Florida Citizens to keep utility rates increases at the minimum and we felt that, if nothing else, we'd find a sympathetic ear in the Attorney General's Office.

If it were possible, we'd like to join with your office in bringing a restraint of trade suit against AT&T and the Bell System.

Rice International Corporation is a little over 3 years old and duly organized under the laws of Florida. We have a patented telephone device (brochure enclosed) that has literally been kept off the market for over 2½ years by AT&T's and Bell's unwillingness, or inability, to provide us with an interface device.

Let me put down a series of events in chronological order:

(1) An interface, or interconnect device, is *not* a requirement under the law, but rather, an option which may be exercised by AT&T and the Bell System, to protect their network and their employees from harm.

(2) Such an *option* may only reasonably be exercised when it is within the capability of AT&T and/or the Bell System to provide such a device and may not be unreasonably implemented to deny free enterprise access to the telecommunications network.

(3) In February of 1971, Bell (here in Miami) installed an interface device at our offices on Red Road. The device did not work with the Rice Multi-Phone. We were told by an AT&T Assistant Vice President (T. W. Scandlyn) that another device was being prepared, by AT&T that would more closely fit our

needs. Over 2½ years later, that interface device was installed (on June 15th, 1973) and it does not work with the Rice Multi-Phone.

(4) AT&T and the Bell System have compromised us into waiting all this while and, we charge that they have selectively discriminated against Rice International Corporation in giving us assurances (over a 2½ year period) that an interface would be provided. Needless to say, our corporation has lost countless dollars in revenue and the public has been denied a very useful and much needed service.

(5) Over two years ago, Southern Bell of Miami, installed two Rice Multi-Phones for a local subscriber. This installation was made WITHOUT an interface device and was connected long enough for Bell to determine that our Multi-Phone performed as we claimed . . . that it performed without incident or harm to their network and/or employees and yet, when Bell discovered what they had done, the subscriber was forced to disconnect the Multi-Phones under threat of discontinuation of service.

(6) AT&T and/or the Bell System are clearly unable, or unwilling to provide us with an interface within timeframes set by themselves. And, AT&T and Bell and Rice have now exhausted all possibilities of having a working interface device within all *reasonable* timeframes. (2½ years is just a darned unreasonable period of time for compliance on the part of Bell & AT&T.) Paragraph B4, of Section 34, of Southern Bell's Exchange Tariff (on file with the Florida PSC) clearly states that it is the responsibility of AT&T and Bell to "furnish and maintain" such an interface device.

(7) After two attempts (over 2½ years apart) The Bell System and AT&T have failed to comply. We now find ourselves in a position where we are prepared to demand that AT&T and The Bell System waive this option to require an interface and that we be permitted to "hardwire" directly into their network so that we might take our product to the "marketplace" and no longer be denied our right to a profit.

On June 28th, 1973, we wrote to Mr. T. W. Scandlyn, Ass't. VP of AT&T and, in so many words, made these demands. (A photo-copy of my letter is enclosed.) As of this date, we have not received the courtesy of a reply.

Also on June 28th, we re-opened our files at the Federal Communications Commission and on July 12th, we filed for a formal hearing before the FCC. (photo-copies of these letters and documents are also enclosed.)

On July 5th, 1973, Charles Rice, our President mailed a letter to B. D. Williams, District Marketing Manager of Southern Bell, here in Miami. We enclose a copy of this letter as well.

All these copies and my letter to you will, hopefully, give you some idea of the frustrations and loss of revenue which we, as a corporation, have experienced in the more than three years that we've been in business.

Can you help? Thank you, Sir.

Most sincerely,

Fritz Gibson, Jr.,

Chairman of the Board of Directors.

AUGUST 6, 1973.

Mr. T. W. SCANDLYN,
Assistant Vice President,
A.T. & T.,
New York, N.Y.

DEAR MR. SCANDLYN: 39 days ago, on June 28th, 1973, I wrote a 1½ page letter to you and sent copies to all the Directors of AT&T.

We haven't received the courtesy of an answer from anybody!

I realize that you're busy but, please be good enough to refer to your files, read my letter again and give us an answer . . . any kind of an answer . . . just an answer.

Thank you.

Sincerely,

RICE INTERNATIONAL CORP.,

Fritz Gibson, Jr.,

Chairman of the Board of Directors.

AUGUST 8, 1973.

Mr. T. W. SCANDLYN,
Assistant Vice President
 A.T. & T.,
 New York, N.Y.

DEAR MR. SCANDLYN: This is to acknowledge receipt of your letter to me dated August 6th, 1973.

My letter to you of the same date must have crossed yours in the mails.

Thank you for your reply. We will respond at a later date.

Very truly yours,

RICE INTERNATIONAL CORP.,
 FRITZ GIBSON, JR.,
Chairman of the Board of Directors.

MULTI-PHONE,
 Miami, Fla., July 17, 1973.

Mr. SAMUEL GORDON,
Assistant Chief of Special Trial Section,
 U.S. Department of Justice,
 Washington, D.C.

DEAR MR. GORDON: In our last letter to you, dated November 16th, 1972, we submitted photo-copies of letters and documents which we felt would substantiate our claim that we had been, and are being, selectively discriminated against by AT&T and the Bell System.

On July 15th, 1973, Southern Bell, here in Miami, installed AT&T's much heralded interface (the STP). The STP doesn't work! The STP is excessively expensive . . . excessively large, physically and excessively complicated to install. It took approximately 10 Southern Bell employees to complete the installation. But, regardless of these facts, the STP does not work with the Rice Multi-Phone.

After two attempts (over 2½ years apart) to install interface devices, Southern Bell & AT&T have failed to supply Rice International Corporation with a compatible connector.

The electrical characteristics of the STP are clearly not compatible with the Multi-Phone. As a matter of fact, the STP is not even compatible with other Bell equipment. In other words, any Bell lines used with Customer Owned Equipment may *not* employ *any* Bell equipment other than the STP interface. This means that any customer who desires to use his own equipment must either remove all Bell equipment or, request additional, separate lines (from Bell) for the implementation of his Customer Owned devices.

It is our opinion that Bell's requirement for additional lines for Customer Owned Equipment, certainly violates the spirit (if not the letter) of the pertinent court decisions involving interconnection rights.

Southern Bell Representatives, here in Miami, have stated that it is their "policy" not to permit Bell equipment to work in harmony with Customer Owned Equipment, even if the COE is behind their interface. We know that this "policy" fails to apply with ALL Customer Owned Equipment. So, it follows that Rice International Corporation takes the position that, once again, it is being had . . . we are being selectively discriminated against by The Bell System and AT&T.

Paragraph B4, of Section 34, of Southern Bell's Exchange Tariff (on file with the Florida Public Service Commission) and, the Interstate Tariff, FCC #263 (on file with the Federal Communications Commission) clearly states that it is the responsibility of AT&T and The Bell System to "furnish and maintain" interface devices for use with Customer Owned Equipment.

AT&T and the Bell System are clearly unable to provide Rice International with an interface, even within timeframes set by themselves. We feel that 2½ years is an *unreasonable* period of time to wait for such an interface . . . even if it worked and, it does not! Now, are we going to be required to wait for another undeterminable period of time or, is there a way that we can demand permission to "hardwire" directly into their network? We know and AT&T and Bell know, that there's no way that our device can cause harm to their network

or to their employees. As you know, an interface device is not a requirement under the law, but rather, an option which may be exercised by AT&T and Bell, to protect their network and their employees from harm.

We feel that such an option may only be exercised when it is within the capability of Bell & AT&T to provide an interface within a reasonable period of time. As mentioned earlier, 2½ years is not a reasonable period of time. We also feel that Bell and AT&T are using this option to deny free enterprise (in this case, Rice International Corporation) access to the telecommunications market. We have been "compromised" by AT&T and Bell into waiting all this time and, needless to say, our Corporation has lost countless dollars in revenue and the public has been denied a very useful and much needed telecommunications service.

For your information, Mr. Gordon, we filed a Formal Complaint with the FCC, on July 12th, 1973. In this complaint (copy enclosed) we also asked for a hearing.

We have requested and permission will be granted to appear before the Florida Public Service Commission at their next regularly scheduled meeting, August 14th, 1973.

Yesterday, July 16th, 1973, we wrote a letter . . . similar to this one to you . . . to the Attorney General, State of Florida, seeking whatever relief that his office might provide.

As you can see, our frustrations continue to mount. We see no immediate relief in sight.

We would certainly appreciate your advice as to our next step.

Thank you very much, Sir!

Most sincerely,

RICE INTERNATIONAL CORP.,

CHARLES F. RICE,

President.

MULTI-PHONE,

Miami, Fla., July 17, 1973.

Mr. CHARLES A. TOBIN,
Secretary,
The Federal Trade Commission,
Washington, D.C.

DEAR MR. TOBIN: I have enclosed a photo-copy of a letter from Mr. Arthur R. Woods. I understand that he is no longer with The Federal Trade Commission.

Late last week, I spoke with Ms. Josephine Caneron in your office and she suggested that we write to you, sending along files concerning the plight of Rice International Corporation.

I assume that your file, on Rice International, is voluminous. But, in the event that you can't readily put your hands on the information which is pertinent to our case, I've enclosed extra copies.

Mr. Tobin, to be just as brief as I possibly can we feel that we've been selectively discriminated against by AT&T and The Bell System. We feel that we're standing on good, solid ground in our wish to bring a restraint of trade action against AT&T and Bell.

We've been waiting for over 2½ years for an interface device, which The Federal Communications Commission, under Interstate Tariff (FCC #263), gives them the *option* to require . . . for use with Rice's Multi-Phone and other Customer Owned Equipment.

AT&T and The Bell System are either unwilling or unable to supply such a device. And, Rice International Corporation, after being in business for over three years and after having requested the first interface device almost three years ago, is now tired of being compromised by AT&T & Bell.

In other words, we'd like to force them to permit us to "hardwire" directly into their network of telecommunications lines. And, we'd like the assistance of The Federal Trade Commission.

If I were AT&T & Bell, I'd now come back to Rice International Corporation and say something like, "excuse me . . . we've provided you with the wrong interface device, but, we're going to send you another one and this time it will work." We've heard this before so, it's natural to assume that we'll hear it again. But, in the meantime, in trying to work within the system . . . to stay within the telecommunications industry, we've purposely refrained (unlike the

manufacturers of many foreign attachments) from taking our products to the marketplace.

Rice International Corporation now finds itself in a position of needing immediate relief. Otherwise we're likely to run so short of finances that we'll be forced to discontinue further development of useful and much needed telecommunications products. As a matter of fact, we consider the Rice Multi-Phone as a piece of equipment, patented in the U.S. and other countries, not now available through any telephone company, anywhere, to be one of the most useful products available to the telecommunications industry. And, more importantly, this service is one that is being denied the American telephone subscriber . . . and, this denial is the fault of AT&T and Bell.

When, may I ask, is some Governmental Agency going to step in to provide the relief that Rice International, and others like us, so desperately need?

Sir, we fully realize that you have other problems. But, we would very much appreciate your taking the time to review our files and offer suggestions as to what we might do to get our product on the market. Very honestly, we're darned tired of wearing our "white hats" . . . we're tired of seeing competitive products being advertised and sold with no apparent effort being made to stop them. And, many of these products are being hardwired into the network without an interface device.

Thank you very much.

Most sincerely,

RICE INTERNATIONAL CORP.,
CHARLES F. RICE.

President.

AMERICAN TELEPHONE & TELEGRAPH Co.,
New York, N.Y., August 6, 1973.

Mr. FRITZ GIBSON, JR.,
Chairman of the Board of Directors,
Rice International Corp.,
Miami, Fla.

DEAR MR. GIBSON: This is in response to your letter of June 28, 1973 regarding the operation of your Multi-Phone in connection with Connecting Arrangement STP.

Our basic goal in the design of protective connecting arrangements is that they be applicable to the widest range of customer-provided equipment consistent with the service to which access is being provided and the functional requirements of that equipment. Because of the variety of network services offered, and the variation in functional complexity and mechanical interface requirements of the connecting equipment, over 70 connecting arrangements have been designed and are now available. It is the responsibility of the manufacturer of the equipment to select the proper available arrangement or request AT&T to consider the development of a new type of arrangement.

In the course of our early 1971 contacts with Rice International two existing arrangements, CEBAX and STC, were installed for use with the Multi-Phone. Although both arrangements are in service with other types of equipment elsewhere in large quantities, the Multi-Phone was not directly compatible with these arrangements and Rice International apparently chose not to modify their device to be compatible.

In October 1971 Mr. Rice was advised that a new arrangement was in the early stages of development for generic application for multiline terminal equipment and *might* be applicable to the Multi-Phone. This statement was made based upon our limited knowledge that the design characteristics of the Multi-Phone required a 2-wire interface with talking battery and dc current supervision in order to function, all of which would be included in the STP. Development proceeded and within a year and a half, a relatively short space of time considering the complexity of the circuit dictated by the interface requirements, the arrangement was in full production.

The resulting arrangement, STP, was installed on an expedited basis in June 1973 for Rice International with the standard 24-volt battery and 30 Hz ringing options. Although key telephone systems and station instruments have proven to be compatible with these STP options, the Multi-Phone apparently is not. Unfortunately on July 5, 1973 Rice International chose not to allow members of Southern Bell's Engineering department to visit your company to see if the use

of additional available options with the STP might eliminate any incompatibility between it and the Multi-Phone.

It is difficult to determine wherein the Multi-Phone incompatibility lies since Rice International has never provided us with specific interface requirements. We would be happy to discuss the interface requirements of the Multi-Phone at any time. Perhaps one of the available STP options will permit the Multi-Phone to operate, or perhaps some modification to the Multi-Phone would be in order. It should be pointed out, however, that we consider the basic design of the STP as sound and useful and expect it to be in great demand for a variety of equipment already on the market which is compatible with this design. While we do not contemplate changes in the basic design of the STP, we are always willing to discuss the feasibility of developing new connecting arrangements to meet a demonstrated need.

You also allege that Southern Bell Telephone installed two Rice Multi-Phones directly to the network without a connecting arrangement and allowed them to remain in service for over two years. To the contrary, our discussion with Southern Bell has revealed one instance where a pair of jacks were installed for Dispatch Services of Miami for use with Bell System telephones and that on a premises visit many months later, a Multi-Phone was discovered to have been installed in these jacks by the customer. As you know our filed tariffs require that a protective connecting arrangement be installed by the telephone company for use with customer-provided equipment. A letter was promptly sent to the customer noting the tariff violation and as a result the Multi-Phone was disconnected by the customer. In the other instance, to the best of our knowledge, a Multi-Phone was connected by your people in your offices without a connecting arrangement. As soon as that installation came to our attention your people were asked to disconnect the Multi-Phone and did so. We know of no other such installations.

Although you state these two Multi-Phone connections were made "without incident or harm to the network," you disclose no facts in support of this allegation. Furthermore, the potential for harm is the important consideration and the potential for harm is great with this type of unrestricted interconnection. This is especially true since your device has voice amplification, performs network control signaling and, as we understand, is commercially powered.

Mr. B. D. Williams in Coral Gable, telephone 305-350-8514, will be happy to arrange for the installation of the options mentioned above at your convenience. Mr. D. H. Erickson of AT&T, telephone 212-393-3952, will be happy to answer any technical question about Voice Connecting Arrangement STP.

Very truly yours,

T. W. SCANDLYN.
MIAMI, FLA., August 6, 1973.

MR. CHARLES F. RICE,
President,
Rice International Corp.,
Miami, Fla.

DEAR CHARLES: As you know, I have been using the Rice Multi-Phone (in my office and at home) since sometime in June or July of 1970, over three years now.

I have found the Rice Multi-Phone to be most useful and I have come to depend on the Multi-Phone more each day. You, at Rice International, are providing a service that I find very helpful in my day-to-day business activities. As far as I know, the functions performed by the Rice conference and rerouting telephone are not available through any other source including Southern Bell, here in Miami.

After Southern Bell personnel installed four conductor female jacks in my office and at my home I am able to simply plug in the Multi-Phone at home or at my office for use with my Foreign Exchange Calls . . . for use here in the U.S. for conference calls and with the Multi-Phone, I am able to make conference calls and have calls rerouted to me locally. I particularly appreciate the light supervision and automatic disconnect features of the Multi-Phone.

Thank you,
Sincerely,

FOY D. JORDAN.

SOUTHERN BELL.

Coral Gables, Fla., August 6, 1973.

MR. KARL KNIGHT,
*President, Knight Aircraft Corp.,
 Miami, Fla.*

DEAR MR. KNIGHT: This is in reply to your letter dated July 28, 1973, regarding the Rice Multi-Phone.

After recent tests with the STP interface device, we are apprized the Rice Multi-Phone instrument and equipment is not compatible to this device. Because of this situation, it would not be in your best interest for us to install the STP interface devices, at the present time.

As we pursue this situation, you will be kept informed of our progress.

Yours very truly,

B. D. WILLIAMS,
District Marketing Manager.

KENDALL, FLA., *August 31, 1973.*

HON. WILLIAM BEVIS,
*Chairman,
 Florida Public Service Commission,*

CHAIRMAN BEVIS: This concerns an order for the installation of a second telephone line with central office rotary which was originally submitted to Southern Bell in September, 1971. This installation was for use with the Rice Multiphone. (See enclosed copy of correspondence with Mr. Phil Sutton of Southern Bell Marketing Office.)

As I have pointed out in the letter to Mr. Sutton, in spite of the apparent availability of the "special assembly arrangement" referred to by Mr. James Parks of the Florida P.S.C. on April 1, 1972, and in spite of the availability of an interface for use with Rice Multiphone, referred to by Mr. T. W. Scandlyn, Assistant Vice President of AT&T, on May 2, 1973, Southern Bell has made no response whatsoever to the requested installation.

Since nearly two years have elapsed since the installation was first requested and with no apparent attempt by Southern Bell to satisfy the request, I hereby request that the Florida P.S.C. investigate the situation and bring it to a satisfactory conclusion.

Respectfully,

RICHARD L. PUTMAN, D.D.S.

U.S. DEPARTMENT OF JUSTICE,
Washington, D.C., August 6, 1973.

MR. CHARLES F. RICE,
*President,
 Multi-Phone,
 Miami, Fla.*

DEAR MR. RICE: We have your letter of July 17, 1973, complaining that Southern Bell and AT&T have persistently delayed for several years in providing a viable interface for your multi-phone and still have not done so in order to restrict or prevent your marketing this device to telephone subscribers.

As we have informed you in the past, the doctrine of primary jurisdiction in the telephone regulatory agency may be a stumbling block to a court's consideration of the antitrust aspects of the matter. This does not mean that the court lacks jurisdiction or that if an antitrust violation were otherwise present it immunized from the reach of the antitrust laws. It means that a court may refer the matter to the regulatory agency so that the latter may have an opportunity to pass upon it and the court will thus have the benefit of the expert agency's views. Just such a course was followed by the federal district court in Los Angeles in the recent case of *Macom Product Corp. v. AT&T Co.* (1973 CCH Trade Cases, par 74, 598) and we enclose a copy of the court's opinion for your information. Of course, since we cannot give advice to private parties as to the prosecution of any claim they may have, we do not mean to suggest that the *Macom* case is necessarily the last, definitive word on this problem. Since complex issues of communications and antitrust law may be involved, advice of private counsel may be helpful to a complainant.

We note from your papers that you have instituted a formal complaint with the F.C.C. in this matter. Hopefully, a proceeding before the F.C.C. may lead to an early resolution of the problem.

Sincerely yours,

THOMAS E. KAUPER,
Assistant Attorney General,
Antitrust Division.
By : SAMUEL Z. GORDON,
Assistant Chief,
Special Trial Section.

Enclosure :

STROMBERG-CARLSON,
CHARLOTTESVILLE PLANT,
Charlottesville, Va., August 31, 1973.

RICE INTERNATIONAL CORP. ELECTRONICS,
Miami, Fla.

(Attention of Mr. Fritz Gibson, Jr., Marketing Director)

DEAR MR. GIBSON : This is in answer to your letter of August 23, 1973, to Mr. E. Hinehine regarding information on our 5 line key set.

Accompanying this letter is a marked-up catalog sheet and wiring diagrams of our 1700 series 5 line rotary and tone dial key telephones.

In addition I have also enclosed information on the ITT 564 and 2564 type sets which are the same as the Western Electric sets.

Our Stromberg-Carlson 1700 5 line key set is wired different from (but is interchangeable plug wise with) the WE CO 5 line sets. It has the same electrical characteristics. As you can see from the Catalog sheet the Stromberg-Carlson set uses "Call Director" styling. We do not manufacture the WE CO 564 and 2564 type sets.

I hope this information is adequate and meets your needs.

Very truly yours,

EUGEN ROTHACKER,
Technical Staff Engineer,
Telephone Design Engineering.

SEPTEMBER 11, 1973.

Mr. WILLIAM DEMILLY,
Administrative Secretary,
The Florida Public Service Commission,
Tallahassee, Fla.

Good morning, Mr. DEMILLY : In the matter of Rice International Corporation, complainant, vs. Southern Bell & AT&T, we respectfully request a thirty (30) day time extension to reply to Southern Bell's motion as prepared by Mr. Alford, General Attorney for Southern Bell.

Our basis for the above mentioned request is to give Rice International time to locate qualified legal counsel to prepare our reply. Very honestly, we are new at taking on "giants" and had just not realized that this procedure would be required.

We have talked with two law firms and will make our decision very quickly. But, in the meantime we do ask for this extension and hope that this request is not unusual or unreasonable.

Thank you very much for your consideration.

Most sincerely,

RICE INTERNATIONAL CORP.,
CHARLES F. RICE,
President.

FEDERAL COMMUNICATIONS COMMISSION,
Washington, D.C., October 4, 1973.

MULTI-PHONE,
Miami, Fla.

(Attention : E. H. Currie, Vice President)

GENTLEMEN : This is in response to your request dated September 26, 1973, for an extension of time of 30 days to file a Reply to Defendant's Answer in the

formal complaint of *Rice International Corporation v. American Telephone and Telegraph Company and Southern Bell Telephone and Telegraph Company.*

We note initially that your request for extension of time was not timely filed and was not served upon the parties to this proceeding as required by Section 1.729(c) of the Commission's Rules. However, since we believe that your Reply may be of assistance to the Commission in its resolution of this matter, the extension of time you request for filing a Reply is granted to October 20, 1973.

It is expected that in the future you will properly adhere to the Commission's Rules.

Sincerely yours,

KELLEY E. GRIFFITH,
Chief, Domestic Rates Division,
for Chief, Common Carrier Bureau.

SOUTHERN BELL,
Coral Gables, Fla., July 6, 1973.

Mr. CHARLES F. RICE,
President, Rice International Corp.,
Miami, Fla.

DEAR MR. RICE: This is to acknowledge receipt of your letter dated July 5, 1973. We are not in complete agreement with certain sentences stated in your letter. You may expect to receive our comments concerning our position at a later date.

Yours very truly,

B. D. WILLIAMS,
District Marketing Manager.

AUGUST 6, 1973.

Mr. B. D. WILLIAMS,
District Marketing Manager,
Southern Bell,
Coral Gables, Fla.

DEAR MR. WILLIAMS: On July 5th, 1973 (33 days ago) I wrote a 3 page letter to you, stating certain events as we see them.

On July 6th, 1973, you acknowledged receipt of the letter and stated, "You may expect to receive our comments concerning our position at a later date."

Very honestly, the fact that we've received nothing more than an acknowledgement from you is part of the problem that we've faced with Southern Bell and AT&T for over three years. We never seem to get anything from anybody at Bell and/or AT&T but an acknowledgement . . . rarely do we get an answer and *never* have we gotten what we are entitled to . . . a solution to our problem. Namely, a working, compatible interface device for use with the Rice Multi-Phone.

Would you *please* let us know what you're going to do? Or, are we expected to wait another 33 days, or 60 days, or 6 months, or, another year for an acceptable solution to marketing the Multi-Phone?

Thank you.

RICE INTERNATIONAL CORP.,
CHARLES F. RICE,
President.

The following statement was made at a Rate & Service Hearing, before the Florida Public Service Commission, concerning a request by Southern Bell Telephone for a \$32+ million rate increase. The statement was made by Fritz Gibson, Jr., Chairman of the Board of Directors of Rice International Corporation on Wednesday, August 15th, 1973 at Altamonte Springs, Florida.

Good Morning! Mr. Chairman and members of the Public Service Commission . . . my name is Fritz Gibson, Jr. I am Chairman of the Board of Directors of Rice International Corporation . . . a Corporation for Profit . . . organized under the laws of the State of Florida in June of 1970. Our executive offices are located at 1260 N.W. 57th Avenue, Miami, Florida 33126. Phone 264-2535 (305)

With me today are Charles F. Rice, President and E. H. Currie, Vice President of Rice International Corporation. These gentlemen will answer questions of a technical nature which you or your engineering staff might have.

In April of 1972, Mr. Rice, Mr. Currie and I appeared before Chairman Yarborough and Commissioners Bevis and Mayo . . . Mr. Clayton Moore, of your staff, was also present at this meeting. Over a year ago, we began seeking the assistance of the Florida Public Service Commission in getting our Patented Rice Multi-Phone to the market place. The Multi-Phone is a self contained conferencing and re-routing telephone, with the latest state of the art, solid state circuitry . . . all buried in an epoxy to keep the components free from dust and moisture. Our circuitry, built into the telephone instrument, permits the subscriber to dial his own local or long distance conference calls and to have calls re-routed to him . . . wherever he wants to be reached by telephone. The Rice Multi-Phone provides many services and a convenience not now available . . . in its present form . . . through any telephone company in the State of Florida or, in the United States, for that matter.

Long before meeting with the members of this Commission, in April of 1972 . . . on August 8th, 1970 . . . now over three years ago . . . we submitted, at the request of AT&T in New York, our United States Patents and copies of Schematic Drawings of the Rice Conferencing and Re-routing Telephone . . . this was done with the hope that we might interest the Bell System and/or AT&T in incorporating our Patented device into their system. On October 1st, 1970, F. K. Wurst, AT&T Engineering Manager replied that he had completed a study of our submitted Patent and that our unit (and I quote) "does not contain any novel features which are of Bell System interest or which are likely to become of interest in the future."

In early 1971, we at Rice International began to exhaust all our known legal remedies to attempt to get our Patented Product to the market place. And, finally, in September of 1971 had to threaten litigation to get an audience with AT&T's Engineering Representatives. We threatened litigation after having been promised a compatible connecting arrangement and after having had an incompatible device installed in our offices, by Southern Bell, in June of 1971. The device was later removed from our premises when it became obvious to Bell that their coupler did not work with the Multi-Phone.

In October of 1971, roughly 3½ months after the first non-working coupler had been installed, Bob Rivenes, of AT&T's New York Engineering Staff, paid a visit to our offices and with words to this affect said, "We will develop a compatible interface for Rice. But, it will cost AT&T about \$10,000.00 and will take approximately one year."

On July 24th, 1972 . . . *nine months later* . . . in a letter from T. W. Scandlyn, Assistant Vice President of AT&T, addressed to Kelley E. Griffith, of the Federal Communications Commission . . . as a result of an informal complaint filed with the FCC by Rice International . . . Mr. Scandlyn stated (and I quote) "As a result of our continued discussions with manufacturers such as Mr. Rice, a new connecting arrangement is presently under development that will accommodate the use of customer provided terminal equipment (e.g., key systems) and which will incorporate features we believe may make this arrangement suitable for use with the current model of the Multi-Phone. Present estimates indicate the introduction of this connecting arrangement early in 1973."

Well, this long awaited and much heralded interface device was installed by Southern Bell in the offices of Rice International . . . not in *early* 1973 . . . but, on June 15th, 1973.

I am certain that you can guess what I'm about to say . . . this connecting device was also incompatible . . . after more than 2½ years of unsuccessful attempts on the part of AT&T and Bell to, as their own tariffs on file with this Commission dictate, "furnish and maintain an interface device for use with customer owned equipment."

As a result of these time consuming and costly delays, caused either by Bell's and AT&T's inability, or unwillingness, to provide us with an interface, on July 12th, 1973, Rice International filed a Formal Complaint with the Federal Communications Commission, requesting a hearing before that body. On August 9th, 1973, we filed a Formal Complaint with the Florida Public Service Commission, requesting a public hearing before you.

Ms. Hawkins and Gentlemen of the Commission, we maintain that for more than 2½ years we have been intentionally denied our lawful and rightful place in the telecommunications industry . . . by the unwillingness of AT&T and Bell to provide a compatible connecting arrangement within timeframes *set by them-*

selects. With all the technological and engineering know-how of AT&T and Bell, we stipulate that 2½ years is an unreasonable length of time to wait for a suitable connector . . . a *service* if you will, and I understand that is part of what this hearing is about . . . which tariffs, written by Southern Bell and on file with this Commission . . . state that they, in their own language must "furnish and maintain" such interface devices.

We at Rice International, unlike many of those who are presently manufacturing and marketing "foreign attachments", have purposely kept our Multi-Phone off the market. We are the only manufacturer and marketer of a "foreign attachment" . . . that I know of . . . who have kept their products off the market . . . who have tried to work within the system . . . who have tried to stay within our industry, rather than going outside to bootleg or blackmarket our unit . . .

While Rice International Corporation was founded as a profit making organization and has, for over 3 years, waited patiently for AT&T and the Bell System to comply with the law . . . both Federal and State . . . it (Rice) finds itself confronted by what appear to be insurmountable problems with the most formidable of adversaries. We find, that in the words of the 1934 Federal Communications Act, that the telephone company . . . in this case, Southern Bell and AT&T . . . engages in *unreasonable and unfair and illegal* practice and that they . . . AT&T and Bell . . . have failed repeatedly to meet explicit legal requirements to furnish and maintain an interface for Rice International.

If the general public is to continue to allow AT&T and Bell . . . or any other corporate entity . . . the privilege of providing their telecommunications networks and equipment, it must not be done at the expense of integrity, fair practices and the law. As important as the telephone is to our society today, there are fundamental considerations which must be met regardless of any others and these considerations go far beyond the wishes and desires of any single corporation. In a society which purports to be founded upon principle and believes that reason is to prevail and for the law is to insure the freedom and the rights of its citizens, there can be no compromise with those who deliberately disobey the law. We live in a time in which many have lost faith in our political leaders . . . in the due process of law . . . in the fundamental principle that individual rights must prevail . . . and, when faith in our system is lost then, the system is lost. Many in our Nation have, in a very real sense, defaulted in their responsibilities to the system.

But, Rice International Corporation will continue to exhaust every possible avenue for relief . . . not only to insure its right to participate in the marketplace but, equally important, to insure that AT&T and/or the Bell System is faced with the realization that in any democratic society freedom must go hand in hand with responsibility . . . that might cannot be allowed to determine right . . . that the law must be obeyed by all; that those who would work within the system (such as ourselves) in order that we do our part in helping to maintain the system, be afforded all the protection and co-operation that the system has to offer. Those who would actively and openly exploit the system must be dealt with swiftly and unequivocally.

Though Rice International is indeed a small (and perhaps to AT&T and Bell an insignificant) corporation, we still suffer feelings of having been compromised by these two giants . . . of having had promise after promise of services to be rendered . . . only to see these promises treated very lightly . . . broken . . . and additional promises made. We, at Rice International, are tired of being compromised . . . we are tired of being promised a compatible interface . . . we are tired of inaction on the part of Bell and AT&T . . . we have been provided with very poor service indeed . . . all intended, we believe, to "make us go away". Well, we aren't going to go away. And, when our public hearing is scheduled before this body, we are going to prove that our device is not harmful to the telecommunications network and to the employees of telephone companies and, we are going to ask this Commission to permit us to "hardwire" directly to the network without the benefit of any interface device.

Mr. Chairman, Ms. Hawkins and Mr. Mayo, this concludes all the remarks that I have to make on behalf of Rice International at this time . . . we thank you for this opportunity to appear before you today and, if you, or any of the members of your staff have any questions, Mr. Rice, Mr. Currie or I, will attempt to answer them for you. Thank you very much!

COMPLAINT—BEFORE THE PUBLIC SERVICE COMMISSION, STATE OF FLORIDA

Complainant: Rice International Corporation, 1260 N.W. 57th Avenue, Miami, Florida 33126; Charles F. Rice, President; Fritz Gibson, Jr., Chairman of the Board; Dr. Richard L. Putman, DDS, Exec. Vice Pres.; Dr. E. H. Currie, PhD,

Vice President; Ms. Viola Schroeder, Secretary & Treasurer.

v.

Defendant: Southern Bell Telephone & Telegraph, 330 Biscayne Boulevard, Miami, Florida 33132; Walter Alford, General Attorney

and

American Telephone & Telegraph, 195 Broadway, New York, New York 10007; T. W. Scandlyn, Assistant Vice President.

The Complainant Alleges & Shows the following:

(1) That, at this time, AT&T and the Bell System should default (or waive) their OPTION to require an interface device for operation with the Rice Multi-Phone. This demand is predicated on the following pertinent points:

(a) Rice International Corporation has, on it's own accord, withheld its product (the Rice Multi-Phone) from the telecommunications market for more than two and one half years . . . based upon assurances by AT&T and/or Bell that an interface device would be provided within timeframes set by AT&T and/or the Bell System.

(b) Southern Bell of Miami has installed two Rice Multi-Phones *without* an interface, i.e., hardwired direct to the Bell network, by Bell employees, using a simple four prong jack. Both Multi-Phones have performed for over two years without incident and/or harm to their network or to their employees.

(c) AT&T and/or the Bell System are clearly unable, or unwilling, to provide the connecting equipment necessary within their own set timeframes.

(d) An interface is not a requirement under the law but instead, an option which may be exercised by Bell and/or AT&T to protect their network and employees from harm.

(2) That AT&T and the Bell System have failed to meet their acknowledged commitment to provide and maintain an interface device to be used with the Rice Multi-Phone. (Paragraph B4 of Section 34 of Southern Bell's Exchange Tariff, on file with the Florida PSC and FCC Tariff #263, on file with the Federal Communications Commission, clearly state that it is the responsibility of AT&T and the Bell System to "furnish and maintain" interface devices for use with Customer Owned Equipment.

A letter from T. W. Scandlyn, Assistant Vice President of AT&T, New York, addressed to Rice International dated June 21st, 1973, states the following: "You have asked when delivery of the interface device can be made. The device is available now and can be delivered in a short period of time."

(3) That in early 1970, Rice International Corporation began seeking an interface device from AT&T and/or the Bell System and that, in February of 1971, AT&T promised the first of several interface devices and this first device was finally installed in May of 1971.

(4) That, the said interface did not work and was incompatible with the Multi-Phone.

(5) That, in June of 1973, a second interface was installed by Southern Bell in the offices of Rice International Corporation and, that said interface is not compatible and does not work with the Rice Multi-Phone. This fact is confirmed by those responsible for the installation . . . all Southern Bell Employees.

(6) That at this time, AT&T and the Bell System should default or waive their option to require an interface for the Multi-Phone because: AT&T, the Bell System and Rice International Corporation have now exhausted reasonable possibilities of having a working, compatible interface within a reasonable period of time. And, that Rice International Corporation has been denied access (by AT&T's and Bell's inability, or unwillingness, to provide such an interface) to the telecommunications industry and market and, that Rice International Corporation should be provided immediate relief and be allowed to hardwire directly to the telecommunications network.

Dated at Miami, Dade County, Florida, this 9th day of August, 1973.

CHARLES F. RICE,

President.

FRITZ GIBSON, JR.,

Chairman of the Board of Directors.

Charles F. Rice, President of Rice International Corporation and Fritz Gibson, Jr., Chairman of its Board of Directors and Assistant Secretary and Assist-

ant Treasurer, being first duly sworn, on oath, depose and say: That they are empowered by the Corporation to represent the Complainant, Rice International Corporation, in the above entitled matter; that they have not only read the foregoing complaint, but said complaint was prepared by them and they therefore know the contents thereof, and that the matters and the things contained therein stated are true of their own knowledge, save and except those matters therein stated on information and belief, and as to those they believe them to be true.

Subscribed and sworn to before me this 9th day of August, 1973.

BEFORE THE FEDERAL COMMUNICATIONS COMMISSION

Washington, D.C.

RICE INTERNATIONAL CORPORATION, COMPLAINANT

v.

AMERICAN TELEPHONE & TELEGRAPH CO. AND SOUTHERN BELL TELEPHONE AND TELEGRAPH CO., DEFENDANTS

REPLY

Now comes the Complainant, Rice International Corporation, and pursuant to Section 1.732 of the Commission's Rules and Regulations for its REPLY to the answer of the defendants herein states as follows:

As to the allegations of Section I of the answer:

1. Rice International alleges that defendants have failed to meet their acknowledged commitment to furnish, install, and maintain a connecting arrangement for the Rice Multi-Phone. Furthermore, that defendants have failed to comply with the tariffs and that in exercising Rice's right to make an informal complaint, pursuant to Section 1.716 of the Commission's Rules and Regulations, to the FCC, which then compelled AT&T, pursuant to Section 1.717 of the "Rules" to "satisfy the complaint or advise the Commission of carrier's refusal or inability to do so", Rice was unable in the reply to determine that AT&T had so complied. Finally, implicit in the tariffs and the Communications Act of 1934 is the necessity for compliance with the provisions therein a reasonable period of time.

2. Rice International understands upon knowledge and belief that as early as October, 1972, defendants were instructed that defendants' practices and policies with respect to furnishing connecting arrangements for customer provided equipment are at variance with the tariff language on the subject, and since the practice is in direct conflict with the offering, the FCC may recommend forfeiture in any complaint where it is established that the telephone company is unable or unwilling to provide connecting arrangements or network control signaling units until the two are brought into concert.

3. Allegations of "good faith" efforts are alleged, by Rice, to be vacuous.

4. Rice International denies that the STC connecting arrangement was installed in the Complainant's offices.

5. Rice International is without sufficient knowledge to make reply to allegations regarding the time at which the STP was developed or nature, degree and extent of compatibility with equipment other than the Rice Multi-Phone.

6. Rice International specifically and categorically denies that any member or representative of any telephone company or subsidiary or affiliation thereof has ever been denied access to the premises of Rice International for any reason what-so-ever, at any time, in the past or present and furthermore, no individual or group of individuals have been so denied.

7. Rice alleges that all allegations of defendants' failure to act in compliance with the existent tariffs, based upon lack of denial of access to premises, fails.

8. Rice International alleges that, since 1970, Rice has engaged in numerous conversations with AT&T and Southern Bell (i.e. defendants) staff members and engineers, and that, in 1971, copies of Patents, schematics and drawings were supplied to AT&T and that at no time have any requests for information been denied, nor has Rice failed to act in full and complete compliance with the requests for information, technical data and/or other requirements of the defendants. And, furthermore, any lack of sufficient information failed to be communicated to Rice International and that such Patents, schematic drawings, informations, etc., as were provided and supplied to the defendants were sufficient when submitted and supplemented by the ensuing conversations and correspondence as to cast serious doubt upon the professional competence of any engineer or staff member who was unable to discern the specific technical requirements of the Rice Multi-Phone. And finally, any such judgements indicate

a level of competence which is not in keeping with the Public Trust and High Standards of performance and competency alleged by the defendants.

As to the allegations of Section II of the answer:

1. Rice International denies that two types of interface were installed in the early part of 1971.

2. United States Patents were issued to Rice International in 1969 and furthermore, the tariffs make no stipulations as to the requirements that manufacturers must design their equipment to be compatible with telephone company connecting arrangements.

3. It is unreasonable and unjust to require manufacturers to base designs upon conditions and constraints of connecting arrangements as provided by a fixed number of interface devices as determined by the telephone company, as it permits the possibility and potential for harm to the manufacturer, in the form of anti-competitive activity by the telephone company, and the tariffs make no such provisions or requirements.

As to the allegations of Section III of the Answer:

1. Rice International has not alleged that the interface devices which were installed were defective and this term does not appear in the complaint.

2. Allegations which are explicit or implicit, in the answer, as to whether or not the interface devices installed were, or were not defective, are unsupported in fact and, since formal testing procedures were not instituted for the purpose and intent of determining the nature and extent of functioning of the interface device in its own right, such allegations are necessarily vacuous.

3. Any allegations as to the nature and extent of functioning of the interface devices, in their own right, or in conjunction with equipment other than the Rice Multi-Phone is alleged immaterial and irrelevant to these proceedings, whether such allegations be supported in fact or not.

As to the allegations of Section IV of the Answer:

1. The first statement of this section is reaffirmed as stated in the complaint and the remainder of this section is, in the main, a recapitulation of Section I and has been considered in Section I of this Reply.

As to the allegations of Section V of the Answer:

1. The term connecting arrangement is reasonably interpreted as including, among other things, those types of objects which are generically referred to as interface devices as well as, in the literal sense, some type of connector(s) and/or connection device.

2. The term "option", in the statement of the Complaint by Rice, refers specifically to the existence of the condition of free choice in the selection of an interface device, or a connector, or connection device.

3. Rice International lacks any knowledge of any requirement by any agency, or any tariff, regulation or rule, that the telephone company may implement only those connecting devices, which are also interface devices, in the sense as stated supra. Therefore, the allegation of Section V of the Answer, fails.

4. As for the specific reference to the tariffs, failure to comply therein has already occurred in that the telephone company has not furnished, installed and maintained an interface device and is therefore subject to forfeiture.

As to the allegations of Section VI of the Answer:

1. Rice International, in its attempt to be in full compliance with the tariffs (i.e. laws) related to direct connection of customer owned equipment, alleges that it (i.e. Rice) must have a suitable connecting arrangement. And, Rice has, upon the assurances by AT&T and The Bell System (and based upon the specific requirement that the telephone company *shall* furnish, install and maintain a connecting arrangement) withheld its products from the marketplace for a period of three years.

As to the allegations of Section VII of the Answer:

1. Rice International replies with copies of letters from F. D. Jordan, of Dispatch Services and B. D. Williams, Southern Bell District Marketing Manager, dated July 18th and July 25th, 1972, respectively.

2. Rice International denies having been informed of any tariff violations in their offices and has, at no time, made any statements regarding removal of a Multi-Phone from its offices.

3. Defendants recite no facts in support of their allegations that the direct connection (electrical) of the Multi-Phone to the telephone company networks, poses an ever present potential for serious harm to the network and its em-

employees. And, Rice may not properly be expected, or required, to respond to unsupported and ill-defined allegations.

4. Rice International alleges that it constitutes a non sequitur to allege insufficient knowledge of Rice Multi-Phone, to determine the specific interface requirements and then state in the affirmative that the Rice Multi-Phone poses an ever present threat to the network and its employees, for serious harm. Such logic and ensuing arguments are sufficiently irrational as to render them vacuous.

5. The defendants cite no instances or evidences of failure to assure that potential for harm is minimized to the greatest extent possible. And, the complainant is of sufficient knowledge in this regard to make further response.

As to the allegations of Section VIII of the Answer :

1. Rice International alleges that whether or not the telephone company denies or admits that they are unwilling, or unable, to provide a connecting arrangement does not alter the fact that a connecting arrangement does not exist for the Rice Multi-Phone . . . after three years of patient waiting, on the part of Rice, for AT&T and/or Bell to comply with the tariff. The tariff states that the telephone company shall furnish and maintain. And, a tariff is law. Furthermore, a basic precept of law is compliance within a reasonable time. A period of three years exceeds any rational judgment for such compliance.

As to the allegations of Section IX of the Answer :

1. Rice International reaffirms the allegations of Section (5)(d) of the complainant and reiterates the response of Section V of the Reply.

As to the allegations of Section X of the Answer :

1. Defendants allege in Section I of the Answer that Defendants have "never been provided with specific interface requirements of the Multi-Phone" and, in Section X of the Answer allege that "the time expended in attempting to resolve this problem has not been unreasonable in light of the complexity of the interface requirements involved". Rice International is unable to make response to allegations of the Defendants which mutually conflict and are fundamentally contradictory to, and incoherent with, the principles of rational logic.

REPLIES TO AFFIRMATIVE DEFENSES

1. As to the allegation that the Complainant fails to state a claim which may be granted in that the conduct of the Defendants to which the Complainant refers has, at all times, been in accord with the Communications Act of 1934, as amended and, the applicable tariff provisions filed pursuant to such Act are lawfully in effect.

(a) The Communication Act of 1934 as referred to supra, states explicitly that, "all charges, practices, classifications and regulations" of the telephone companies, "shall be just and reasonable" and all "unjust or unreasonable" practices are declared to be unlawful. 47 U.S.C. Section 201(b). Rice International alleges that such practices as those by the telephone company, which have denied the Complainant access to the marketplace (due to AT&T's failure to comply with the tariffs) on the basis of the above, unlawful.

(b) Defendants have failed to comply with the specific requirement under the law (Tariff #263) that the telephone company shall furnish, install and maintain a connecting arrangement. And, that Defendants have been advised previously, by The Federal Communications Commission, that such actions or failure to act may result in forfeiture.

2. Rice International denies that the subject matter involves equipment to be used predominantly in intrastate and exchange service. Furthermore, much of the present body of tariffs and regulations in The State of Florida, is patterned after the associated tariffs, on file with the FCC. It has been, and continues to be, the intent of Rice to market its products on a world wide basis, national and international, as evidenced, in part, by the Patents presently held by Rice, in many foreign countries, and by its advertisements in national publications. Furthermore, procedures on the State and Federal level are not mutually exclusive and Rice anticipates that much of its formal argument shall be contingent upon FCC postures, positions and rulings. Finally, Federal regulations of the type involved, are preemptive of conflicting State regulations as suggested recently by the Federal Justice Department. And, it is fully within the Constitutional rights of Rice International to pursue these matters in both Federal and State level forums coincidently.

3. Statements of policy which are at variance with performance, and the existing tariffs, are immaterial and irrelevant. The present tariffs place the burden of provision of a suitable connecting arrangement squarely upon the shoulders of the telephone company. The manufacturer has not been, and is not presently, constrained by these tariffs, to the role which so-called "policy" statements aver. This issue has been clearly stated by the FCC, that is: the "tariff language and offering is at variance with the practice." Failure to attain compliance with the tariff, within a reasonable interval of time, constitutes flagrant disregard for, and violation of, the law, and should reasonably result in forfeiture, as proposed by the FCC. The FCC has, upon the knowledge and belief of Rice International, numerous complaints as to the difficulty of obtaining connecting arrangements, attaining compatibility with connecting arrangements and excessive tariff and installation charges of connecting arrangements. It has been estimated recently that the number of illegal devices presently in use, exceeds 6,000,000 devices which, when contrasted with 200,000 additional devices which allegedly employ interface devices, shows that less than 3.25% of the devices presently in use are "harmless". It is not the intent of Rice International to champion the illegal device market but, rather to indicate that claims and allegations that the telephone network will be destroyed or irreparably damaged by uncontrolled interconnection, must be viewed critically. Certainly, the network and its personnel are valuable assets and must be protected from harm. But, so must those who would act in compliance with the law and in a generally responsible manner, be held from "harm".

4. As stated previously by Rice International, adherence or lack thereof, to policies which are at variance with, or in conflict with, tariffs on file with The Federal Communications Commission are immaterial and irrelevant to these proceedings. The tariff specifically states that the telephone company is to furnish, install and maintain. Defendants continue to allege that they have fully adhered to "this policy of co-operation", in their dealings with Complainant. They allege having acted in "good faith". Paradoxically, however, after almost three years of correspondence, special conferences with engineering and technical staff, submission of technical data, viz. schematics, drawings, descriptions, etc., repeated informal appeals to the FCC for assistance, (which were in turn conveyed to AT&T) discussions by telephone, the mails and face-to-face confrontations, etc., the world's largest corporation, backed by what is perhaps the most sophisticated and well equipped laboratory complex and staff, in the world, finds that it is unable to determine "whether the use of additional options, etc., etc., might eliminate the incompatibility . . ." This same giant makes continued referral to supposed obligations on the part of the manufacturer to, if necessary, modify his circuitry to achieve compatibility. That any entity, be it corporate or otherwise, could have the temerity to conclude with the statement that "they are now, as in the past, prepared to make every reasonable effort to co-operate with the Complainant in arriving at a connecting arrangement suitable for use with Complainant's Multi-Phone", is completely beyond the understanding and belief of Rice. It is further alleged, that among honorable men, such may not reasonably be termed congruous with "good faith".

5. Rice International alleges that in view of the tariff requirement that the telephone company furnish, install and maintain a connecting arrangement (and Rice finds no mention of the STP in the tariffs) that all allegations as to development time, availability, etc. are immaterial and irrelevant to these proceedings. The tariff does not state the requirements, supra, in the conditional, but rather, in the imperative. Rice appreciates that a finite period of time is required for the development and perfection of such circuitry, but, submits that the tariff as quoted supra, has been in existence since 1969 and, that the Complainants may not reasonably be constrained from the marketplace for a period of some three years, simply because a "transparent-box" (i.e., an interface device which has the same electrical characteristics, specifications and capabilities of the telephone company lines, with which it is employed so that, for all intents and purposes, it admits transparent access to the telephone company lines) was #69, #70, or #71 in the telephone company's list of priorities and, is, at the very least unreasonable, unjust and therefore, at variance with the tariffs and the Communications Act of 1934. Furthermore, the language of the tariff employs the generic term, "connecting arrangement", which does not reasonably infer that an interface device is mandatory in those instances in which serious

potential harm is absent. It is significant that one alleged "standard option" provided, was a 24-volt battery, since 24-volt battery is not standard in the exchanges in which this device is to operate, or was initially installed. Rice International alleges that appearances as to compatibility or incompatibility are immaterial and irrelevant. Southern Bell representatives stated specifically that the STP was incompatible with the Multi-Phone. Allegations as to lack of access are vacuous and have been treated in Section I (6). Rice International provided those data and informations as were requested, as stated previously in Section I (8). Section 1.730, of the Rules and Regulations states, in part, "Collateral or immaterial issues shall be avoided and every effort made to narrow the issues". To the extent that such allegations, as to incidental signals, etc., may be allowed, Rice International alleges, whether or not certain signals are incidentally present in the network, they are none-the-less present and, it could, perhaps be alleged that failure to utilize all characteristics and properties of the telephone company lines, to the fullest extent, could properly be interpreted as failure to comply with the spirit, if not the letter, of The Communications Act of 1934. Where signals are not generated in the central office, optional features of the Multi-Phone will effect disconnect of the appropriate telephone lines. The allegation, if it may properly be deemed as such, is indeed a curious one when contrasted with the characteristics of many of the devices, interfaces, connecting arrangements, etc., of the telephone company, which may be readily placed in a state in which line seizure is not terminated without intervention on the part of either the central office or the customer. For example, the most trivial case occurs when the standard telephone handset is not properly returned to the instrument to effect the hookswitch "off" state. A plethora of similar instances may be provided upon necessity or request. It is alleged that this entire section of the Affirmative Defenses should properly be struck as immaterial, irrelevant and incompetent.

6. The phrase, "connecting arrangements", is properly a generic one which refers to those devices known specifically as interface devices as well as four-prong plug jacks, amphenol-type connectors, etc. Thus, the tariff does not specifically require that an interface be furnished, installed and maintained. But rather, a connecting arrangement. It should be noted that by virtue of the existence of an alleged 70 "connecting arrangements", presumably not all identical, it is clear that the telephone company has seen fit to determine the nature of the connecting arrangement in any given instance. As to the phrase, "potential harm", and/or equivalently "potential for harm", Rice International alleges that the telephone company has the right and obligation to protect its network and its personnel, from harm, to the extent that such protection does not occur to a degree and extent which reasonably constitutes "over-protection", to be supported financially by the public and, at a loss of service to same. It is insufficient, inapposite and inexpedient to couch regulatory rules and regulations in terms of phrases of such nebulosity, as "potential harm" and "potential for harm". If logical consistency and content is to be attained, emphasis must be placed upon the probability, degree and extent of harm, in concert with judicious appraisal of the relative significance with regard to expense, reliability, service, public interest, etc. Rice International cannot respond to "understanding" which is without basis in fact, with regard to the Multi-Phone and voice amplification. As for network control signaling, Rice International states that the Multi-Phone is basically a standard telephone, equivalent electrically and mechanically to specific Western Electric instruments. And, to the extent that Western Electric instruments constitute serious harm to the network and its personnel, so also may the Multi-Phone constitute harm. As to external power, and the potential for harm, Rice alleges that such Multi-Phones as are equipped with optional supervisory lights, for determining line status and that this constitutes no more harm than the Princess telephones, key telephones, etc., all of which are externally powered. It is indeed fortunate that such extensive concern for the networks and personnel does not extend uniformly throughout all aspects of American life, since such arguments as herein presented by the Defendants would lead inexorably to prohibition of everything of an electrical nature, in the home and place of business, except for the telephone service which, at that point would, itself, be of questionable value.

7. It has been said of the Defendants that, "they have a habit of trespassing on eternity". The Complainant alleges that It has been brought to the full

realization that its corporate lifetime may well, as a result of the telephone company's "good faith" activities and practices, be significantly more finite than had ever been conceived. In point of fact, Rice International can, at this juncture, discern no significant difference in its present status from that of some three years ago. Then as now, Tariff #263 stated that, "The Telephone Company shall furnish, install and maintain a connecting arrangement". Then as now, Rice International had products suitable for marketing in the Telecommunications industry. Then as now, Rice International believed that, as honorable men in business, that full compliance with the stated tariffs was of paramount importance. Then as now, Rice International stood by helplessly as it saw its corporate financial resources dwindling, with day after day passing with no income from sales. Then as now, Rice International made appeal after appeal to the telephone company for compliance with the tariffs, while competitors encourage their customers to connect illegally to the networks, without regard for the network integrity or safety of the Defendants personnel. Then as now, Rice International believed that the preservation of the System, meant working within the System, to the welfare of all. Then as now, Rice International attempted to continually improve their evergrowing line of products in eager anticipation of the day on which Rice could say, honorably and forthrightly, that its products were the finest available anywhere and, that the consumer could confidently and readily connect them anywhere within the Bell area. Then as now, the Telephone Company assured Rice International that they were not unwilling or unable to provide a suitable connecting arrangement and, then, as now, no such connecting arrangement has come forth.

Wherefore, it is respectfully requested that Rice's original complaint not be dismissed and that the Commission not defer taking action on this COMPLAINT and REPLY.

Respectfully submitted,

RICE INTERNATIONAL CORP.,
By: CHARLES F. RICE, *President*,
By: FRITZ GIBSON, JR., *Chairman*,
By: E. H. CURRIE, *Vice President*

1260 N.W. 57th Avenue,
Miami, Florida 33126.

October 20th, 1973.

CERTIFICATE OF SERVICE

It is hereby certified that copies of the foregoing REPLY of Rice International Corporation, dated October 20th, 1973, have this 20th day of October, 1973, been sent by First Class Mail to the following:

Mr. BERNARD STRASSBURG, Esq.,
Chief, Common Carrier Bureau,
The Federal Communications Commission,
1919 "M" Street,
Washington, D.C. 20554.
Mr. KELLEY E. GRIFFITH, Chief,
Domestic Rates Division,
The Federal Communications Commission,
1919 "M" Street,
Washington, D.C. 20554.
ROBERT W. STERRETT, Esq.,
Southern Bell Tel. & Tel. Company,
Hurt Building,
Post Office Box 2211,
Atlanta, Georgia 30301.
HAROLD J. COHEN,
RAYMOND F. BURKE,
CORNELIA McDUGGALD,
American Telephone & Telegraph Company,
195 Broadway,
New York City 10007.

By: FRITZ GIBSON, JR.,
Chairman of the Board of Directors,
Rice International Corp.,
1260 N.W. 57th Avenue,
Miami, Fla. 33126.

[Excerpt From Telecommunications Reports, Vol. 38, No. 26, July 3, 1972]

AT&T PRACTICES IN CONNECTION WITH FURNISHING CONNECTING ARRANGEMENTS ARE IN CONFLICT WITH TARIFF. FCC BUREAU SAYS IN RECOMMENDING CHANGES

The practices and policies of the American Telephone & Telegraph Co. in furnishing connecting arrangements for customer-provided equipment are at variance with its tariff language on the subject, the Federal Communications Commission's Common Carrier Bureau has stated, in suggesting tariff changes.

If the present tariff language is construed in favor of the customer, the bureau said, it states that "the telephone company will provide a network control signaling unit and connecting arrangement for any item of customer-provided equipment. The tariff does not state that connecting arrangements are available only for customer-provided equipment which was either designed in accordance with your technical references or for which the manufacturer has cooperated with (AT&T) in the development of a new standard arrangement."

The bureau emphasized that it did not wish to imply it had concluded that the company should make the offering implied by the tariff language. It suggested, as a result, that AT&T "may wish to consider modification in your tariff language which set forth the limitations which you believe might be reasonable on your obligation to provide a connecting arrangement."

Since the practice is in "direct conflict" with the offering, the bureau said, it may recommend forfeitures in any complaint where it is established that the telephone company was unable or unwilling to provide connecting arrangements or network control signaling units, "until the two are brought into concert."

—End—

SOUTHERN BELL.

March 18, 1974.

MR. CHARLES F. RICE,

President,

Rice International Corp.,

Miami, Fla.,

DEAR MR. RICE: This is to confirm our conversation of Friday, March 15, 1974, in which you agreed to our request for a joint inspection of the Multi-Phone to facilitate testing of its compatibility with the existing interface devices.

We appreciate your willingness to permit and participate in an examination of the Multi-Phone which will serve not only to coordinate the orderly and sensible presentation of evidence in this case, but might also limit the matter ultimately to be considered herein and facilitate a resolution of the differences.

It should be expressly understood that in offering a conduct such testing Southern Bell is not proposing to relieve Rice International Corporation of its responsibility of devising a Multi-Phone which is operational with our telecommunications network.

In the interest of expediting this matter without further delay we have asked the Florida Public Service Commission Engineer most familiar with this case to participate in this inspection. Since the Commission Engineer, Mr. Clayton Moore, will be available on Thursday, March 23, 1974, we have arranged for AT&T and Bell Telephone Laboratory personnel to be in Miami at the same time. In addition to myself, the following people will be at your office on Thursday, March 23, 1974, at 10:30 AM, for the joint inspection:

Mr. Clayton Moore, Fla. Public Service Commission.

Mr. W. L. Coe, AT&T.

Mr. R. E. Barbato, Bell Telephone Laboratory

Mr. J. T. Lightle, Southern Bell Telephone Company.

Mr. Wendell Ford, Southern Bell Telephone Company.

Your cooperation in this matter is greatly appreciated, and we shall look forward to seeing you on Thursday.

Yours very truly,

B. D. WILLIAMS,
District Marketing Manager.

RICE INTERNATIONAL CORP.,
Miami, Fla., March 29, 1974.

MR. B. D. WILLIAMS,
District Marketing Manager,
Southern Bell,
Coral Gables, Fla.

DEAR MR. WILLIAMS: Regarding your letter of March 18th, 1974 and our subsequent meeting on Thursday, March 21st, 1974, Rice International Corporation is forthwith complying with Mr. J. T. Lightle's request to state our objections to the STP interface device: (1) Telephone service is completely lost in the event of a power failure, (power failures are fairly common in South Florida) (2) The STP isolates us from other section and terminal equipment in use by us in our offices, (the same would hold true with any other subscriber using the MULTI-PHONE behind an STP.) (3) The STP may protect your network but negates the responsibility of the telephone company to "protect" the subscriber by providing him with an interface device which is truly "transparent".

We were pleased that Southern Bell instituted this March 21st meeting to attempt to make the STP compatible with the Rice MULTI-PHONE. And, we appreciate the presence of:

Mr. Clayton Moore, the State of Florida PSC.

Mr. W. L. Coe, AT&T, New York.

Mr. R. E. Barbato, Bell Labs.

Mr. J. T. Lightly, Southern Bell, Miami.

Mr. Wendall Ford, Southern Bell, Miami and, yourself.

Your newly found spirit of co-operation is appreciated but, the STP as we know it at this writing, is still inoperable and still essentially the same as when installed originally in June of 1973.

We understand that it is Bell's intention to install a unit with the STP to permit the 20 cycle ringer modification. Rice International is at a loss, however, to understand why Bell chose to install the STP originally, with options which are not standard in Southern Bell's area . . . namely, the 30 cycle ringing current and 24 volt local battery.

We do believe that we understand Western Electric's purchase order for our 5-line Multi-Phone and Bell's sudden renewed interest . . . could it be because of the now postponed (April 1st) hearing before the Florida PSC?

In summary, Rice International finds, that as of this date, it's plight is as follows:

(a) Rice International was not advised of Southern Bell's intentions or activities in behalf of Rice International covering the period July 5th, 1973 thru March 21st, 1974, even though your tariff states that the telephone company shall "furnish and maintain" a connecting arrangement.

(b) The STP interface, installed in our offices in June of 1973, existed in the inoperable state in which it was installed from June of '73 to March of '74.

(c) To obtain even partial compatibility additional components were required to effect a modification of the plug-in circuit cards and additional apparatus connected.

(d) The STP interface is presently inoperable with the Rice MULTI-PHONE as of this date . . . as it has been since June, 1973.

I hope that this complys with Mr. Lightly's request!

Thank you.

Very truly,

CHARLES F. RICE, *President.*
AMERICAN TELEPHONE AND TELEGRAPH CO.,
New York, N.Y., July 16, 1974.

MR. CHARLES F. RICE,
President,
Rice International Corp.
Miami, Fla.

DEAR MR. RICE: For the record, I would like to reply to your letter dated March 29, 1974 to Mr. B. D. Williams and hopefully clear up some of the misconceptions stated and clarify information furnished to you at that time.

In addition, I would like to furnish to you a report of the conclusions reached in the May 9, 1974 visit to your premises by Messrs. B. D. Williams, L. D. Speranza and D. Driscoll of Southern Bell and Mr. R. E. Barbato of Bell Telephone Laboratories. It is my understanding that tests leading to these conclusions were witnessed by you; Dr. Currie, your Chief Engineer; and Mr. Muce, your accountant. I will respond to your March 29, 1974 letter and attempt to provide information in the same sequence in which it was presented.

(1) *Page 1 item 1* Telephone service is completely lost in the event of a power failure.

Answer. The amount of power required for terminal devices, including protective connecting arrangements, preclude powering them from line current. Since the alternative is to provide a local power source, generally rectifiers or power units, the Bell System offers to customers a choice of four arrangements to assure continuity of service during outages of commercial power service. These arrangements are described in a Technical Notice—PUB 42607 (copy attached) and are listed below:

A. The Telephone Company will install a reserve battery supply that will supply the necessary DC current to operate the connecting arrangements at all times.

B. Connecting Arrangements PFB transfers a line from the connecting arrangement to a Telephone Company-provided telephone set during power failures and automatically returns the line to its normal condition when commercial power is restored.

C. Connecting Arrangement PFC transfers a line from the connecting arrangement to a Telephone Company-provided telephone set during power failures. When commercial power is restored, the line will not be transferred back to its normal termination if a call is in progress until the user has completed his conversation and goes on-hook.

D. Connecting Arrangement VCP permits the customer to supply his own battery supply to power the connecting arrangements. He may furnish either 24 or 48 volt DC at his option. Voice Connecting Arrangements C2ACP, C2AKS and STP, in addition to those listed in PUB 42607, can be installed with any of the above arrangements. An additional charge is applied for the services listed in A through D.

(2) The STP isolates us from other station and terminal equipment in use by us in our offices.

Answer. It is not practical in most cases to mix customer-provided key telephone systems, such as the Multi-Phone, and Telephone Company-provided key telephone systems on the same line due to signalling, supervisory and transmission considerations as well as an almost impossible task of defining maintenance responsibility in cases of trouble. I might add that lack of a maintenance organization by the supplier of the customer-provided equipment greatly compounds the maintenance problem. For the reasons stated, it is Bell System policy not to connect Bell System key telephone systems and customer-provided key telephone systems to the same line unless the customer understands these limitations.

(3) The STP may protect your network but negates the responsibility of the telephone company to "protect" the subscriber by providing him with an interface device which is truly "transparent".

Answer. Neither the Bell System nor other communications experts have yet been able to design a truly "transparent" interface device that would protect both the subscriber and the network. To my knowledge, the responsibility you refer to is not delegated to the Bell System by any regulatory body but I must admit we have devoted a lot of time, talent and money in search of such an elusive device.

Page 1, Para. 2 The March 21st meeting was not instituted to make the STP compatible with the Rice Multi-Phone. On the contrary it was instituted to see if a determination could be made of why the Rice Multi-Phone, which supposedly had an equivalent ringer to the Bell System 500-type telephone set, does not work with STP when several thousand STPs were already providing trouble free operation in similar installations.

Page 1, Para. 3 As demonstrated at our meeting on March 21st, by connecting Bell System 500-type telephone sets to the STP Connecting Arrangements installed in your office, they performed flawlessly all of their intended functions.

Page 1, Para. 5 24 volt battery and 30 Hertz ringing are standard for power units installed on the customers' premises by Southern Bell and throughout the Bell System. Many independent telephone companies also use the same standard. 20 Hertz ringing supplies were discontinued several years ago for reasons of economy. A power supply which is no longer manufactured had to be obtained for the tests made at your premises.

Page 2(a) In the period cited, i.e., July 5, 1973 through March 21, 1974, several exchanges of correspondence took place between Southern Bell and various Rice International Personnel, AT&T Company and Rice International, as well as correspondence between Southern Bell and the Florida Public Service Commission.

Page 2(b) See comments to your Page 1 Para. 3.

Page 2(c) As you know, the additional resistance added to desensitize the trip circuit made absolutely no difference in the operation of STP with the Rice Multi-Phone. (The tripping problem will be covered in greater detail in the report of the May 9, 1974 meeting.)

Page 2(d) See report of May 9 meeting.

MAY 9, 1974 MEETING

The following is a description of tests made, the methods and instruments used in making the tests, test results and conclusions reached as a result of the tests performed on May 9, 1974 and at various other times:

Test instruments used included the following:

- Tektronix Oscilloscope
- Simpson Multi-Meter
- Western Electric 6F Noise Measuring Set
- Western Electric 1013A Hand Set

The following is a verbatim copy of the report submitted to me and has not been altered editorially or otherwise:

Utilizing the oscilloscope, 6F Noise Measuring Set and other equipment, the following information was monitored, observed and recorded:

The Rice Multi-Phone (presumably the set tested previously on April 30, 1974) was connected to the STP arrangement to determine the cause of the pre-trip problem. Later model sets as requests in the previous meeting, were not proffered, at this time.

During our test phases, the following information was obtained:

1. We originated a call to the first line of the Rice Multi-Phone through the STP. The ringing was tripping prematurely. We then determined an off-hook condition was present without the hand set being off the cradle. This condition was substantiated as follows:

- A. By making measurements with the oscilloscope on the STP it showed this off-hook condition.

- B. The number was again re-dialed from a separate facility with the called line indicating a busy condition.

2. The oscilloscope was then placed on the second line, and this was observed:

We originated another call to the first line. The observance on the oscilloscope showed cross over of ringing voltage from the first line to the second line in the magnitude of approximately 18 volt peak-to-peak, 20 Hz.

Simultaneously, another observance on the oscilloscope, as stated above, the caller could detect distortion in the ringing signal.

3. In a test of the output to the STP utilizing the oscilloscope, it was determined the ringing voltage from the STP to the Rice Multi-Phone was 250 volt peak-to-peak, 20 Hz.

4. A. When an incoming call on the first line and the oscilloscope connected between lead CR on the STP and ground of the second line, 10 volt peak-to-peak, 20 Hz was observed.

- B. Under the same conditions as in "A", the oscilloscope was connected to lead CT and ground of the second line, 16 volt peak-to-peak, 20 Hz was observed.

Steps 4A and 4B further substantiated that spill-over of ringing current existed from the first line to the second line.

5. A call was established on the second line from Rice International to the West Miami Plant office using the second line of the rotary. We then requested that the West Miami Plant office originate a call to the first line of

the rotary. With the oscilloscope connected across the second line it was observed that a spill-over of ringing volt of approximately 18 volt peak-to-peak, 20 Hz was present. The conversation in progress on the second line was disturbed by the 20 Hz signal on the second line; to such an extent that it interfered with the voice transmission.

Identical tests were conducted with the Rice Multi-Phone hard wired to the central office without the STP. Similar results were observed but to a lesser degree.

6. Under the same conditions stated in "5", the 6F noise measuring set was substituted for the oscilloscope across the second line. This measurement indicated the interfering noise level on the second line was approximately 50 DBRN.

7. In reversing the procedure to monitor the first line with the equipment and originate call on the second line, as previously described, the same condition occurred.

8. To determine whether the pre-trip condition was caused by false operation of the ringing trip circuit in the STP unit, or by a false off-hook signal from the Rice Multi-Phone, we disabled the ring trip circuit in the STP. Under these conditions, the only way ringing can be tripped would be with an off-hook signal from the Rice Multi-Phone during the silent interval of ringing. An incoming call was placed to line one with the ring trip circuit disabled. Pre-trip did occur. The observance on the oscilloscope again showed that an off-hook signal was provided by Rice Multi-Phone without the hand set being removed from the cradle. During the tests with the ring trip circuit disabled, it was observed that at the end of a ringing cycle a transient (voltage spike) would appear, at times, across the CT and CR leads of the STP. Further tests showed that with a Southern Bell telephone connected to the STP, the spike existed, and it was not detrimental to the operation of the Bell System phone. No pre-tripping occurred in the Bell telephone.

Indications are that the voltage spike was being generated by the capacitive and inductive reactance present in the ringer. With the Rice Multi-Phone connected in a similar fashion, the identical voltage spike was observed, but indications were that the transient was adversely affecting the Rice Multi-Phone.

This appeared to be causing a false off-hook signal from the Rice Multi-Phone. Without a ringer connected across the CT and CR leads, no spikes were present at the end of any ringing cycle.

9. During the formal tests, as stated above, it was apparent that the Rice Multi-Phone ringing circuit appeared to be a most unusual arrangement. It was obvious that the bell would respond to incoming calls on either line. Mr. Rice contended that the bell is associated with one line and should not ring on both lines as was being experienced.

Tests also indicated that polarity of the lines would affect the ringing status as well. With one line or the other disconnected, the bell did not respond at all. By connecting one half of the second line to the CS lead, the bell would respond to either line.

As these tests were being concluded, Mr. Rice advised the instrument being tested was his earlier set. This was the one which was always demonstrated in previous visits and utilized in all testing procedures. Mr. Rice implied the set could be damaged.

Mr. Rice was requested to provide the standard production model of which we had requested in our April 30, 1974 meeting. Up to this point, it was not made available. Mr. Rice offered three telephones, supposedly of the later vintage, for tests.

In testing all three models, we were unable, at any time, to get an audible ringing signal on either line on any of the three telephones. Even though the bell did not respond, no pre-tripping was experienced. At this time, Mr. Rice stated these telephones probably did not have a ringer connected to the lines.

No effort was made by Rice International to open the sets and verify if bells existed. At this point, it was obvious the three last last sets provided were not standard production models, and no further attempts were made by Rice International to provide any additional sets. It was determined further tests would accomplish no purpose.

At this point, Mr. Rice, together with Dr. Curry, requested time to re-evaluate their equipment and position. They questioned the possibility of getting together at a future date.

In response, Mr. Williams stated that when production models were available for tests, we would consider the possibility of making arrangements for future tests.

In conclusion, the opinion was reached that the Rice Multi-Phone's that were tested are not acceptable instruments to be implemented in the telephone industry.

END

I support the above conclusion based on the facts submitted and would only add that the Bell System would not be interested in standardizing the device in question for general use in the Bell System.

Yours truly,

W. L. COE,
Assistant Engineering Manager.

RICE INTERNATIONAL CORP.,
Miami, Fla., July 31, 1974.

Mr. W. L. COE,
Assistant Engineering Manager,
A.T. & T.,
195 Broadway,
New York, N.Y.

Good morning, Mr. Coe . . . and thank you for your letter of July 16th, 1974. Mine, unfortunately, may be as long as yours.

I will respond in the same sequence in which you present your points:

1. I assume that the term, "line current" refers to loop current, in paragraph one, of our Ans. to item 1.

2. Continuing with your Ans. paragraph: We *do* have a communications problem . . . not only with getting our equipment to work with yours, but also in getting you to understand what we are trying to say: Telephone service is completely lost in the event of power failure!

3. Your 1)D: I can't help but inquire where this parade of hardware, (Supplied by the Bell System), is supposed to end; 1st, it was interface . . . next an auxilliary power supply, and now, you are apparently suggesting that a Bell telephone also be obtained. Where, pray tell, does the power come from for these devices? Since, as you explicitly stated, "the amount of power required for terminal devices, (including protective connecting arrangements), precludes powering them from line current" . . . or, is it loop current?

Setting aside the obvious question as to where a customer is to house such an impressive array of paraphenalia, the cost involved, (as pointed out by Southern Bell), would be prohibitive . . . and, they had reference to auxilliary power only!

Perhaps the most incredible proposal of all in your 1)D is that you seem to be seriously proposing that a customer provide a customer owned power supply, for your telephone equipment after AT&T's contention that customer provided power supplies to be used in conjunction with Bell equipment constitutes a serious hazard to Bell equipment and personnel . . . not to mention the additional costs and inconveniences to the customer.

4. Your paragraph 2)Ans. Are we to understand that after four years, it is impossible for AT&T to distinguish between the Rice Multi-Phone and key equipment? Continuing . . . one of the oldest maxims known to mankind is that of "isolate and destroy" . . . there could be no simpler diagnostic approach than to have the customer remove from the lines, any customer owned equipment, to allow determination and isolation of the area of difficulty. Continuing . . . we could do well to confine our attention to the issues at hand and avoid philosophical questions and peripheral statements such as yours regarding customer provided equipment and maintenance organizations . . . we understand this problem and, it is one that we can solve.

5. Your paragraph 3)Ans. We suggest that you make a public offering of, say \$10,000.00, to the first communications engineer who successfully develops a transparent interface since your people can't seem to handle it. Or, better yet, just make the specifications available. If one were to accept your statement as being factual, one could draw no other conclusion than that the telephone company exhibits a grave lack of technical competence. Seems to us that Rochester

Tel has the problem solved. If one were to view your position from a slightly different perspective, one might well conclude that what is lacking in this instance is motivation and not technical competence.

6. Your page 3, paragraph 1. Your statement is in direct contradiction to fact. The fact of the matter is that, no one, either your personnel or that of Southern Bell, has made a determination that the STP was functioning in accordance with manufacturers specifications; furthermore, had such a determination been made, it would have served no purpose to modify and test at the March 21st, 1974 meeting.

7. Your page 3, paragraph 2. The statement, "they performed flawlessly all of their intended functions," is indeed a puzzling one . . . puzzling, first of all, because the 500 telephone is not a piece of key equipment. Key equipment is allegedly the type of customer owned equipment that the STP is designed to interface with. Secondly, the 500 type of set is the least sophisticated of all your station apparatus. Thirdly, it is not acceptable in the 20th century to use performance performance, undocumented by rigorously measured data, obtained by calibrated instrumentation . . . to make explicit statements to arrive at conclusions based solely upon a casual observer's intuitive impressions which, in this case, are so blatantly self-serving.

8. Your page 3, paragraph 3. The point is that 24 volts battery and 30 cycle ringer are not standard within the Bell System, except in the case of the interface device. Why introduce an interface device of even the slightest transparency and alter the customer out-put from that which he would otherwise experience . . . change for changes sake?

9. Your page 3, paragraph 4. Except for a receipt, acknowledging delivery of our letter to Southern Bell, dated July 6th (and, this hardly constitutes correspondence) our records show no . . . repeat None . . . i.e. zero correspondence between the dates specified in our letter of March 29th. Our statement stands as expressed as of that date. As to your final sentence: Rice International has no information as to the nature, extent and degree of correspondence between Southern Bell and the Florida Public Service Commission. Although, one would assume that the regulator would converse with the regulatee. And, quite frankly, we're astounded that your claim of correspondence should go unsubstantiated . . . the best refutation on your part would have been to present photo-copies of the alleged correspondence . . . unless of course, it did not exist. This is a well established and standard procedure, practised by all professionals and by most business groups.

It is interesting to note, at this point, that the first three pages of your letter make no direct refutation to the statements contained in our letter of March 29th.

As for the "description of tests made" (down at the bottom of your page 3) and the methods and instruments used in making these tests . . . the test results and conclusions reached by you, as a result of tests performed on May 9th, 1974, and (while we're at it) at various other times, Rice International states the following:

It is not the policy of Rice International to concern itself with specifics of any alleged measurements made by any members of the staff of AT&T and/or the Bell System with regards the Rice Multi-phone. Such measurements, as alluded to, would necessarily have to be made by highly skilled professional individuals, with advanced formal training, at an accredited institution utilizing recognized testing techniques and instrumentation, under stringently controlled conditions. And, all instrumentation would require recent validation, by correlation with secondary standards traceable to primary standards, at the National Bureau of Standards. Furthermore, any such testing and test procedures would have to be outlined in detail, prior to the actual measurements and, at the time of measurements, proof of certification of all test equipment (as outlined above) would have to be furnished within a period not to exceed one week of comparison to a secondary standard.

All recorded information (i.e. data) would have to be witnessed at the time of measurement, by staff members of Rice International Corporation and, copies of same would have to remain on the premises. No deviation from the written report and test procedure would be permissible unless agreed to in writing, by both parties. Finally, serial numbers of all test equipment would be required and following any such procedure, all test equipment would then

have to be recertified by correlation with secondary standards, making similar measurements under similar conditions within a period not to exceed one week.

Therefore, we see no validity to be assigned to any quantitative data allegedly gathered.

It should be noted, by all concerned, that it is at the very least presumptuous upon the part of Bell and AT&T to establish testing procedures and criterion, as well as figures of merit, for an industry which AT&T's Chairman de Butts has publicly stated will be opposed by AT&T and the Bell System by every available means. Such self serving pomposity is intolerable. If tests are to be made, let them be made by certified, independent testing laboratories and institutions . . . those that are void of vested interests.

As to the qualitative aspects of this alleged report: a) It is refreshing to see that for the record, the existence of transients has been established and were observed on the customer equipment side of the interface, by your staff . . . even when a Bell System phone was connected on the customer side and, that with the Rice Multi-Phone connected in a similar fashion, the identical voltage spike was observed. But, indications were that the transient was adversely affecting the Multi-Phone. Note also that the same telephone set has been used throughout a four+ year period in conjunction with devices furnished by Bell for the express purpose of precluding the possibility of obscuring the issues. During this period, the Multi-Phone under test, has been untampered with and remains functional. At the conclusion of the development and maturation of your interface efforts, on Rice's behalf, we shall turn this unit over to an independent testing organization for the assessment of the extent, nature and degree of trauma that this unit has been subjected to.

This concludes our responses to your rather prosaic letter of July 16th, 1974 . . . at this time. It would seem that a major problem in all these proceedings is adherence to the issues. Numerous diversions have been introduced on a continuing basis for the last four years. The principle issues are those outlined in our letter of March 29th, 1974. Your response does not refute our statements. Casual reference to policies or technical incapacibilities, a plethora of undocumented claims, allegations, personal opinions, etc., are of little or no interest and serve only to reaffirm our observation that Southern Bell and AT&T have no intentions of reaching an honorable resolution of the issues within a finite period of time.

We are informed that a considerable number of man hours were expended by Bell and AT&T in preparation of this latest, in what appear to be a series of unending delays and digressions.

If this is indeed the case, it is a sad commentary.

Rice International has, from the beginning, co-operated in every way possible . . . meeting every request . . . exhausting every avenue . . . making appeal after appeal, after appeal for adherence to the law as stated in the tariffs which the telephone company has, itself, written. And, all to no avail! There's meeting after meeting . . . letter after letter . . . phone conversation after phone conversation . . . day after day . . . week after week . . . year after year and, we continue, foolishly, to negotiate in good faith.

And, we still find, at this writing that we are Exactly in the same position in which we began . . . we do not have an interface and we are still without the slightest indication of intent, upon the part of the Telephone Company, to finally come into compliance with the law.

Sincerely,

CHARLES F. RICE,
President.

EXHIBIT 3.—*Letter From Mr. Feiner Re FCC Assistance in Marketing Equipment*

PHONETELE, INC.,
Van Nuys, Calif., September 17, 1974.

HON. PHILIP A. HART,
Chairman, Subcommittee on Antitrust and Monopoly, Committee on the Judiciary,
U.S. Senate, Washington, D.C.

DEAR SENATOR: In my testimony before your Subcommittee, I recited the serious problem I was having in marketing my equipment outside California. I

indicated that the high cost of connecting arrangements had, for all practical purposes, foreclosed any ability to sell my equipment and that I was seeking assistance from the FCC.

I indicated that I was seriously concerned whether the FCC would render timely and meaningful assistance to me. I am now pleased to state they did so per the attached declaratory ruling issued by Mr. Hinchman. Mr. Hinchman was so thorough, I am simply left with nothing more to ask from the Commission at this time.

Please let your records show that the FCC did render this timely relief.

Sincerely,

ROBERT L. FEINER,
President.

FEDERAL COMMUNICATIONS COMMISSION,
Washington, D.C., August 30, 1974.

RICK M. STEIN, Esquire
*Sigelman & Stein,
Beverly Hills, Calif.*

DEAR MR. STEIN: This refers to the "Phony master" devices similar to that given request a ruling with respect to the "Phonemaster" devices similar to that given to Telephonic Equipment Corporation in a letter of July 11, 1973 from the Chief, Domestic Rates Division relating to the "telepatcher" device. Specifically, you ask for a ruling on the question of whether Tariff FCC No. 263 of AT&T requires a "protective connecting arrangement" to be used with the Phonemaster devices.

It is our understanding that the Phonemaster is a solid state mini computer which monitors signals on the telephone line and transmits a tone "restrict" signal to the calling station if an unauthorized number is called and opens the circuit thereby blocking any such unauthorized call.

AT&T's Tariff FCC No. 263, which governs interstate and foreign Long Distance Telecommunications Service, provides at Section 2.6 that for direct, electrical connection of certain types of customer-provided equipment to telephone company facilities, such connection must be through a connecting arrangement provided by the telephone company. We interpret your letter as questioning whether or not the use of a simple terminal block to connect customer-provided Phonemasters would be in accordance with AT&T's Tariff FCC No. 263.

The word "protective" does not appear in AT&T's tariff regulations applicable to the Phonemaster, nor does any word of similar import appear therein. Therefore, insofar as AT&T's interstate Tariff FCC No. 263 is concerned, the "connecting arrangement" required therein need not be "protective." The provision of a simple terminal block by the telephone company would, in our view, constitute a "connecting arrangement" with the meaning of AT&T's tariff for interstate and foreign toll services.

Moreover, insofar as AT&T's interstate Tariff FCC No. 263 is concerned, it is not clear to us that a connecting arrangement of any type is required for the Phonemaster. The types of customer-provided equipment covered in Section 2.6 of Tariff FCC No. 263 include: (a) Data Transmitting and/or Receiving Terminal Equipment; (b) Voice Transmitting and/or Receiving Terminal Equipment; (c) Channel Derivation devices; (d) headsets; and (e) non-powered conference devices. As a device which merely restricts the signals generated by conventional telephone company equipment, and thereby controls the locations to which toll calls may be placed, it is not clear that the Phonemaster can reasonably be construed as being in any of these categories. AT&T appears to contend that the Phonemaster is a "voice transmitting and/or receiving terminal equipment" because it receives "network control signals which are generated to effectuate voice connections" and it transfers "voice frequency signals" to stations through telephone company equipment. However, we find no reference to "voice frequency signals" in the tariff, nor do we believe the Phonemaster device can realistically be said to either "transmit" or "receive" network control signals as those terms are normally used. Accordingly, we do not believe that Phonemaster is a device that can reasonably be construed as being within any one of the aforementioned categories that require a "connecting arrangement." In arriving at this construction of the tariff, we recognize the rule that ambiguous tariffs shall be construed favorably to the user.

In summary, you are advised, pursuant to Section 0.91(e) of the Commission's Rules, that it is the view of the Common Carrier Bureau that AT&T's Tariff F.C.C. No. 263 does not require a connecting arrangement for the Phonemaster and that, even if one is required, under the tariff, a simple terminal block provided by the telephone company would, in our opinion, constitute such an arrangement within the meaning of the tariff.

Sincerely,

WALTER HINCHMAN,
Chief, Common Carrier Bureau.

AMERICAN TELEPHONE & TELEGRAPH Co.,
New York, N.Y., September 19, 1974.

Mr. W. R. HINCHMAN,
Chief, Common Carrier Bureau, Federal Communications Commission,
Washington, D.C.

DEAR MR. HINCHMAN: This is with reference to your letter to Mr. Rick M. Stein, reference 9510, dated August 30, 1974, a copy of which was received by AT&T on September 6, 1974. Mr. Stein, in a letter to the Chief, Common Carrier Bureau, dated August 22, 1973, requested a ruling that AT&T's Tariff F.C.C. No. 263 does not require a Telephone Company-provided protective connecting arrangement to be used with Phonemaster devices manufactured by Phonetel, Inc. In your letter, you have advised Mr. Stein that "... it is the view of the Common Carrier Bureau that AT&T's Tariff F.C.C. No. 263 does not require a connecting arrangement for the Phonemaster and that, even if one is required, under the tariff, a simple terminal block provided by the telephone company would, in our opinion, constitute such an arrangement within the meaning of the tariff."

AT&T is taking this opportunity to state its disagreement with your expressed view and to comment on several of the arguments you advance. AT&T's response to the view stated in your letter is being made recognizing, as stated in the concluding paragraph of your letter, that your views were being expressed as advice under Sec. 0.91(e) of the Commission's Rules, and not pursuant to the authority delegated by Sec. 0.297.

The view stated in your August 30, 1974 letter appears to be based primarily upon two conclusions:

(1) Tariff F.C.C. No. 263 does not speak of a "protective" connecting arrangement, and

(2) your belief that Phonemaster is not a device that can reasonably be construed as being within any one of the tariff specified categories that require a 'connecting arrangement.'

The conclusion that AT&T's Tariff F.C.C. No. 263 does not require a protective connecting arrangement and thus that a "simple terminal block" would satisfy the tariffs fails to take into account all of the relevant provisions of the tariff, the implementation of those tariff provisions and the Commission's own interpretations of the tariff in this regard.

The requirement that connecting arrangements protect the network is apparent from a reading of all the applicable tariff provisions. Section 2.6.2 of Tariff F.C.C. No. 263 is applicable to any customer-provided terminal equipment used in connection with long distance message telecommunications service and requires that customer-provided equipment not "interfere with any of the services offered by the Telephone Company . . . endanger the safety of Telephone Company employees or the public; damage, require change in or alteration of the equipment or other facilities of the Telephone Company; interfere with the proper functioning of such equipment or facilities; impair the operation of the telecommunications system or otherwise injure the public in its use of the Telephone Company's services."

As stated in my October 25, 1973 letter to Mr. Kelley Griffith on this subject, "... direct electrical connection of these [Phonetel] devices to the network without the utilization of telephone company-provided connecting arrangements would violate Section 2.6.2 of Tariff F.C.C. No. 263 and similar provisions in other applicable tariffs. Not only would such connection to the network entail change or alteration of telephone company equipment or facilities but it would also endanger the safety of telephone company employees and cause interference with the system in violation of those tariff provisions." The Phonemaster oper-

ates on commercial 110V ac power and involves the danger that hazardous voltages could be introduced into telephone company lines. In addition, the Phonemaster devices can cause crosstalk and excessive noise on the network as well as misdirected calls and improper billing. The connecting arrangements contemplated in Section 2.6.4 of Tariff F.C.C. No. 263 are required to assure that the direct electrical connection of such devices be accomplished in such a manner so as to prevent, or at least minimize to the extent possible, harms to network services, the network and telephone company personnel. Thus, protective functions incorporated in the connecting arrangement are necessary to effect connection of the Phonemaster in order to avoid violation of Section 2.6.2.

Section 2.6.3 of AT&T's Tariff F.C.C. No. 263 requires that network control signalling be performed by equipment furnished, installed and maintained by the Telephone Company. The Phonemaster device, if connected directly to the telephone lines or through a terminal block, would perform network control signalling in violation of this section of the tariff since it is monitoring the telephone line on outgoing calls and disconnects the line to the central office if the number being dialed is to a "restricted" area. On the other hand, when the Phonemaster is connected through a protective connecting arrangement, these network control signalling functions are performed by the protective connecting arrangement in compliance with the tariff. There is no way in which the Phonemaster device can satisfy Section 2.6.3 unless the network control signals necessary to its operation are generated by the Telephone Company—provided connecting arrangement required under Section 2.6.4 of the subject tariff.

Thus, it is clear and in no sense ambiguous that under AT&T's Tariff F.C.C. No. 263, the Phonemaster is to be connected to telephone company facilities only by means of a connecting arrangement which protects against the harms to which Sections 2.6.2 and 2.6.3 are directed. Further, all connecting arrangements offered under telephone company state and interstate tariffs provide the necessary level of protection to permit conformance with the aforementioned tariff provisions.

We find it difficult to believe that application of "the rule that ambiguous tariffs shall be construed favorably to the user" (p. 2) is appropriate in spite of the potential harm to services of other users of the network and potential danger to employees. We also note a failure to recognize a cardinal rule of construction that particular tariff provisions should be construed so as to harmonize with all the other applicable tariff provisions. The Commission has had no difficulty in recognizing that the connecting arrangement referred to in Section 2.6 is a *protective* connecting arrangement. Thus, it stated very recently that the purpose of the tariff provisions being considered was one of protection. In the *Telent Leasing Corporation* case, 45 F.C.C. 2d 204, the Commission stated:

"A principal thrust and aim of the interstate tariff filed in compliance with our *Carterfone* ruling is to make certain that the telephone network and the employees operating and maintaining that network will be protected from any harm that may be occasioned by the use of customer-owned equipment or systems. Hence, the tariff requirement that such equipment or systems can be directly connected to the telephone facilities only through *protective* interface devices offered by the telephone companies pursuant to those tariffs." (45 F.C.C. 2d at 221; emphasis added.)

The Commission further stated that the States may provide additional interconnection options to the customer, provided that "such regulations accomplish the *protective* objectives of the interstate tariff regulations and in no way permit interference with or impairment of interstate services." (45 F.C.C. 2d at 221; emphasis added.)

In view of the above, it is apparent that under the provisions of the applicable tariffs, the Phonemaster may be connected to the switched network only through a telephone company-provided protective connecting arrangement. A "simple terminal block" would not provide the required protection.

Your observation that the Phonemaster cannot reasonably be classified in any of the categories of customer-provided equipment for which tariff provisions exist, i.e., in Section 2.6.4(A) through 2.6.4(E), and therefore is not subject to the requirements for connecting arrangements is, in our opinion, incorrect. The only customer-provided devices which may be connected to the network are those which fall within the categories specified in Section 2.6.4, and if the Phonemaster device does not fall within one of these categories it cannot be connected at all. In any event, however, as indicated in my October 25, 1973 letter to Mr. Griffith, since the Phonemaster device receives network control signals which are gen-

erated to effect voice communications and transmits voice frequency signals to stations through telephone company equipment, it is used in connection with voice communications and is subject to the tariff provisions relating to voice transmitting and receiving equipment in Section 2.6.4(B).

I trust that these comments make it clear why we disagree with the advice contained in your August 30, 1974 letter to Mr. Stein.

Very truly yours,

T. W. SCANDLYN,
Assistant Vice President,

Exhibit 4.—Ad From PSA Magazine Re Buying New Phone Systems

**So you're about to buy the phone system
to end all phone systems.**

**Before you do, make
one last call on your old one.**

Call us.

When you buy a system, you're simply taking a chance. You're laying out a healthy chunk of capital for equipment you may have to live with a long time.

But when you use our service on a monthly charge basis, you can put that capital to better use in your business. Besides, you won't have to pay property taxes on equipment or worry about insurance.

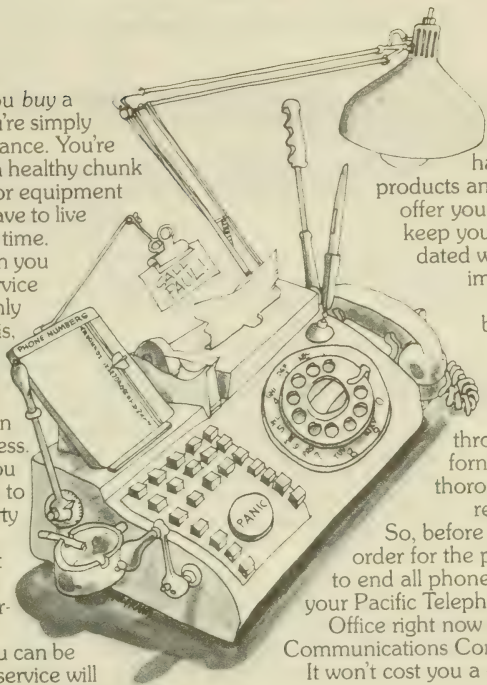
And, you can be sure your service will

never be obsolete.

Pacific Telephone has over 1000 products and services to offer you, and we can keep your service updated with the latest improvements.

All this is backed up by our network of 130 maintenance centers throughout California, with 4000 thoroughly-trained repair workers.

So, before you sign that order for the phone system to end all phone systems, call your Pacific Telephone Business Office right now and ask for a Communications Consultant. It won't cost you a cent.



Pacific Telephone

Part of our business is helping business.

THE INDUSTRIAL REORGANIZATION ACT (S. 1167)

(The Communications Industry)

THURSDAY, JUNE 27, 1974

U.S. SENATE,
SUBCOMMITTEE ON ANTITRUST AND MONOPOLY
OF THE COMMITTEE ON THE JUDICIARY,
Washington, D.C.

The subcommittee met, at 10:50 a.m. in room 2228 of the Dirksen Senate Office Building; Hon. Philip A. Hart [chairman of the subcommittee], presiding.

Present: Senator Hart.

Staff present: Howard E. O'Leary, Jr., chief counsel; Gerald Hellerman, special financial adviser; Janice Williams, chief clerk; Peter N. Chumbris, minority chief counsel; and Michael Granfield, minority economist.

Senator HART. The committee will be in order.

Mr. CHUMBRIS. May I make a brief notation for the record?

Senator Hruska won't be able to get here today as he has to be at an executive session of the Appropriations Committee.

I have just a brief comment to make for the record.

Senator Roman L. Hruska, the ranking Republican on the Senate Judiciary Committee and the Antitrust and Monopoly Subcommittee, has discussed the issues of bigness in business and concentration of economic power and the possible threat of dissolution of such companies, including bigness among the so-called conglomerates.

He has also expressed himself during the hearings on a number of occasions that Senator Hart's bill, S. 1167, would be bad and gave the reasons therefor. Those comments are contained in the earlier hearings on the automobile industry and the communications industry, primarily A.T. & T. Bell System and subsidiaries.

Among his statements are:

Surely our great corporations have made a major contribution to this tremendous progress within our lifetime to see America grow to a fantastic level, shared widely by all.

And further:

Are we threatened by bigness? If we are it is the bigness of Government not the bigness of business or labor. To talk of dissolving our industries is virtually to propose dissolving the basic fabric of our American economy.

The reason I make this statement at this time is there are questions Senator Hruska would have liked to ask these witnesses, but not being at the hearings, he is deprived, because of other commitments, to examine the witness.

Senator HART. I know everyone familiar with the operations of the Congress will understand why Senator Hruska cannot be here.

Our first witness today is the director of trade regulations for Litton Industries, Mr. Theodore F. Craver.

STATEMENT OF THEODORE F. CRAVER, DIRECTOR OF TRADE REGULATIONS, LITTON INDUSTRIES, INC., BEVERLY HILLS, CALIF.

MR. CRAVER. Mr. Chairman, members of the subcommittee, I would like to express my appreciation at being requested to appear here today. I am responsible for the regulatory and antitrust matters pertaining to the business telephone systems division of Litton Systems, Inc., which is a wholly owned subsidiary of Litton Industries.

Litton Business Telephone Systems Division is normally referred to as Litton BTS. Litton BTS is in the business of selling and leasing telephone terminal equipment consisting of PBX equipment, key system equipment, and peripheral devices such as speaker phones and call diverters, things of that sort, to customers of the public telephone network in the United States.

As such, Litton BTS competes with the operating companies of the Bell System and with other telephone companies in the supplying of this equipment to customers of the network.

As such, Litton BTS also is normally referred to as an interconnect company.

I have filed a statement with the committee. However, the statement is rather lengthy, since it is a rather complete compendium of anticompetitive practices that are being engaged in in the telephone terminal equipment industry and a listing of other problems in the way of viable and effective competition in that market.

I don't propose to intrude on the committee's patience by reading the statement. I have noted a few typographical errors in it, and I will work with the committee counsel in correcting those for the record.

However, I would like to summarize what I believe to be the important points contained in the prepared statement.

Senator HART. Please do. We will order the statement printed in the record in full.

[Mr. Craver's prepared statement appears as exhibit 1 at the end of his oral testimony.]

MR. CRAVER. In my appearance, I will address only the terminal segment of the telephone business. I do not propose to address myself to other problems in the communications industry, such as the private-line services.

Litton BTS entered the telephone terminal equipment market in 1970 from a technological base in communications design and hard-

ware manufacturing. This was a part of Litton's Litcom Division, and that division has been engaged for many years in the development of a broad range of military and commercial communications systems, primarily for the Defense Department.

One of the latest projects of the Litcom Division in the commercial areas is the design and installation of a sophisticated communications network for the new Dallas-Forth Worth Airport.

In my prepared statement is a brief summary of the telephone terminal equipment business of the Litton BTS Division. It is noted that the commercial telephone terminal equipment business became large enough in 1973 to be placed into a separate corporation or separate division for administrative, operational, and accounting responsibilities.

At that time the name Litton BTS was adopted for that business.

At the present time, Litton BTS's sales volume is approximately \$20 million at an annual rate.

As a part of Litton Industries, Litton BTS is part of an industrial corporation with worldwide sales in fiscal year 1973 of \$2½ billion, with approximately 135 major divisions, and operations in 27 countries.

Litton's business base is comprised of 14 major product areas as set out in my prepared statement.

We detail four major points of restructuring the telephone terminal equipment market which, based on our experience in trying to sell in this market, are necessary in order to have a viable and effectively competitive market.

These four points are:

Phase Western Electric out of the manufacture of telephone terminal equipment over 5 years;

Place the telephone terminal equipment operations of the Bell System operating companies into separate corporations with separate officers and directors and books of account;

Deregulate the sale and lease of telephone terminal equipment; and

Place the responsibility for protecting the telephone network from harm within the exclusive jurisdiction of the Federal Communications Commission.

The basic underlying reason for our conviction that these four restructuring points are needed is the fact that the Bell System controls 83 percent of all of the telephones in the United States. Combined with the Bell System's complete integration in providing telephone terminal equipment, local and long distance telephone exchange service, and telephone equipment manufacturing, this complex vertical integration makes it the greatest aggregation of economic and political power of any corporate enterprise in the United States.

The market power stemming from the Bell System's size and integration, combined with the State regulatory system and its delays, inefficiencies, and ineffectiveness as described in our statement, plus the power of the Bell System to take advantage of and to manipulate the State regulatory system, give the Bell System the

power to eliminate effective competition in the telephone terminal equipment market as it chooses.

For this reason, in our opinion, if substantial restructuring is not accomplished there will never be a viable effectively competitive market in the furnishing of telephone terminal equipment to customers of the telephone network.

In our opinion competition will not expand beyond its present level of a number of small, fragmented, interconnect companies subsisting at the sufferance of the Bell System.

The evidence today shows that competition with the Bell System in the telephone terminal equipment market is already declining substantially. This is indicated by the bankruptcies and disappearance of a number of companies, even within the last 6 months.

Without substantial restructuring of the industry the Bell System will be free to continue to use its overwhelming power and the State regulatory system to eliminate competition further.

These four points, we believe, are not a drastic divestiture program, nor even such a drastic restructuring that would cause substantial upheaval in the telephone industry.

We set forth a number of elementary premises that we believe support this conclusion.

In the first place, regarding the phaseout of telephone terminal equipment manufacturing by Western Electric, this has substantial precedential support in that in 1956 the Justice Department brought an antitrust suit against IBM and that resulted in a consent order which required IBM to separate its service bureau business into a separate corporation which became known as the Service Bureau Corp.

The salient provisions of the consent order in that case are set out in the prepared statement, and because of their peculiar applicability to a phaseout or a separation of the telephone terminal equipment business of the Bell System operating companies, I think it is important to note the main points of that order.

The separate corporation was allowed to be wholly owned by IBM; but IBM was enjoined from engaging in the Service Bureau business itself.

The Service Bureau Corp. was enjoined from employing any person employed by IBM; and the Service Bureau Corp. was ordered to maintain in accordance with good accounting practice separate and complete corporate records and accounts which shall be audited annually by independent public accountants.

Fourth, the Service Bureau Corp. was ordered to charge for services rendered by it prices based on rates which shall fairly reflect all expenses properly chargeable thereto, with the proviso that the Service Bureau Corp. could meet competitive prices in the marketplace.

All of these points we believe are peculiarly applicable to a separation of the terminal equipment business into separate corporations of the Bell System operating companies.

In the first place, the need for separating all of the costs related to the providing of telephone terminal equipment by the operating companies is crucial to establishing a viable and effective competitive market here.

The reason is that the evidence which we mention later in our statement shows, in our opinion, very conclusively that the Bell System companies do engage in below-cost pricing of their telephone terminal equipment; and that the State regulatory agencies have been ineffective, or disinclined, or simply incapable of preventing this below-cost charging.

One of the reasons is the very basic accounting system which is employed by the operating companies. This is the uniform system of accounts that was set up by A.T. & T. decades ago, and which has been in use ever since.

This accounting system does not afford a segregation of costs into the various lines of business of the operating companies. It lumps the costs of providing terminal equipment in with the cost of providing central office exchange service and other services of the operating companies, the result being that the operating companies engage in charging prices which do not recover the full costs of providing the telephone terminal equipment, and the general ratepayers and other customers make up the difference between the below-cost prices and the full costs of providing that equipment.

Because of the maze of accounting allocations and lumping together of various types of business, it has so far been beyond the capacity of the State regulatory agencies to prevent this below-cost pricing.

The separation of the business into separate corporations would provide the segregation of the costs of providing this terminal equipment business from the costs of operating the rest of their businesses, and would provide for full visibility of those costs, and would allow the application of the antitrust laws of the United States to below-cost pricing and other predatory practices of the operating companies.

We submit that if it was feasible for IBM to separate its service bureau business into a separate corporation, it is just as feasible for the operating companies to do the same.

Mr. CHUMBRIS. Isn't there a big difference between IBM and its service company and A.T. & T. and its subsidiaries because of the fact that A.T. & T. is a public utility and the Commissioners would determine what decision would be made on what is in the public interest and getting the service to the customer at the best possible price?

That isn't so with IBM in whatever services it has, or United States Steel, or General Motors, or any other corporation of that type.

It is an entirely different ballgame. You have to take that into consideration.

Professor Colter, who will be your successor on the witness stand there, will go into those because he was a State regulator and he had to look into those questions when they came before him.

Mr. CRAVER. Well, in the first place, there are very strong similarities between the IBM situation and the telephone operating companies in that the service bureau business of IBM was combined with other businesses and had its costs accumulated with the costs of the rest of the business. This was the very same thing that is the heart of the problem with the operating companies.

For that reason, because these costs are not accounted for in the normal way of applying the costs of a particular line of business to that particular line of business, it is virtually impossible for the State regulatory agencies with the limited staffs that they have, and because of the maze of accounting allocations and groupings and averaging that are done, to tell whether the costs are being properly allocated to the terminal equipment business.

This is what we have been engaged in doing for the almost 2 years that we have been appearing before the regulatory commission; that is, showing them that they don't know what the full costs of the operating companies are in furnishing terminal equipment, and that they don't even have the capacity to go about determining what those costs are.

MR. CHUMBRIS. Still, the difference I am trying to bring out is the fact that we have a selling-below-cost bill pending before us. In section 3 of the Robinson-Patman Act Amendment if you are in an unregulated industry, and there is evidence one corporation is selling below cost to drive competitors out of business, the Justice Department will file suit to correct the situation; whereas in the case of A.T. & T., it is regulated by the FCC, being it a Federal matter, or the State commissioners if it is a State matter, they are going to look into the cost situation, the whole picture, from a completely different angle than the Justice Department would look at a selling below cost in a private industry that is not regulated.

That is the point, I think, on which we are going to need some distinctive data. I know there will be testimony on both sides of the question, but I think we ought to bear in mind that we are talking about two different things when you are trying to compare a private unregulated industry with a regulated one to how they may be violative of the antitrust laws or whatever other Federal laws there are on the books.

MR. CRAVER. In the first place, we have found that most of the time the State regulatory commissions don't even look at the costs of the operating companies in supplying telephone terminal equipment.

MR. CHUMBRIS. Well, Mr. Colter will talk to that. That sounds like a generalized statement. We have been sitting up here a long time hearing people come in and say that the State regulators are not capable of doing the job.

We have had people come in and say that State regulation is much better than Federal regulation in many aspects. There are specific examples to prove it.

So just making a bland statement that State commissions are not capable of handling the problems is not really the answer unless it is shown that there is just complete incompetence in State regulation. I just don't believe it.

I just don't believe that the State legislatures and the Governors and the people running the States are going to permit incompetent commissions. What might be a decision that you don't like from your point of view may be a decision that a lot of people may appreciate, because they are getting a lower rate and good service, whether it is electricity, gas, natural gas, or whether it is telephone services, or streetcar, but service, whatever the case may be.

Mr. CRAVER. Well, I will have more to say on the effectiveness.

Mr. CHUMBRIS. I have read your statement. You will have to convince me that State commissions are not doing their job. We are hearing complaints right now about the Consumer Protection Agency bill that is coming up. It is stated that we need a Consumer Protection Agency because the other Federal agencies aren't doing their job.

That is an important purpose of that Consumer Protection Agency bill. However, the Federal agencies have been defended as the only ones having the expertise to do the job.

What you are saying about State commissions, some people are beginning to say about our own Federal Commissions; and it is a matter of record.

Mr. CRAVER. Of course, I agree with many things you are saying, Mr. Chumbris. I think the basic problem—and what your question really points up—is the problem of trying to regulate this business. The business doesn't need to be regulated; competition will work and has been attempting to work in this market, and there is no reason to assume that it won't work if the shackles of regulation are removed. That is the very point of our statement.

To get back to a brief explanation of the basis for our points, I skipped over the premise on which the phaseout of manufacturing at Western Electric is based.

That is really based on the costing problems of Western Electric, just as the separation of the terminal business of the operating company into a separate corporation is based on the costing problems that the operating companies have.

The Federal Communications Commission in 1939 published a monumental study of A.T. & T. and the Bell System; and they devoted considerable space to the costing methods of Western Electric. That is set out on page 284 to 321 of that 1939 FCC report, which is cited in footnote 5 in my prepared statement.

We hit the highlights of the costing procedures employed by Western Electric, which our cross-examination of Bell System witnesses in the State regulatory agency proceeding has shown to still be in force, just as they were at the time of the FCC's 1939 report.

Basically, the Western Electric accounting system does not assign costs to specific products. Their entire approach to assigning costs is geared to accumulating cost figures for broad product lines. They typically cover hundreds of individual products, and they include competitive terminal equipment which is used for business customers only together with equipment that is used to provide their monetary services, such as their exchange service and their long distance communications service.

Costs are derived for individual products only by broad averaging methods based on the broad product lines; costs on individual products are only set prospectively on the basis of estimated standard costs.

In addition, research and development expense relating to specific products is not charged to specific products. Those expenses are charged to the broad product lines also.

The rate of return at Western Electric is not computed on individual products. It is computed on the basis, again, of the broad product lines.

Therefore, they do not know what the exact rate of return is on any particular product based on the actual costs of designing, developing, tooling, and producing that product.

Furthermore, the evidence shows that there is substantial communication between the Bell System operating companies and Western Electric as to the pricing of Western Electric products which the operating companies provide. The operating companies communicate to Western Electric information as to whether Western Electric's price for terminal equipment is too high in relation to equipment offered by competitors.

This price communication and coordination between the operating companies and Western Electric, combined with the aggregation of cost only on the basis of product lines, and the assignment and computation only of costs and rates of return on the basis of individual products provided great flexibility at the Western Electric level for adjustment in prices on competitive equipment to whatever price is needed to allow the operating companies to charge for that equipment on the basis of whatever level they need in order to eliminate interconnect competition.

The costing procedures at Western Electric level are just as complicated, if not more so, than the costing procedures at the operating company levels, with the result again that even if the State regulatory agencies were inclined to study the costing and pricing of products at the Western Electric level they simply would not be capable of doing so; moreover, not one State agency yet has indicated that it is even inclined or even has authority—well, I shouldn't say has authority—to examine Western Electric costs.

Therefore, the pricing at Western Electric is a complete, total, unregulated process; and is used, according to the evidence available, to produce prices on equipment to the operating companies that do not reflect the full costs of providing that equipment.

These prices in turn are reflected by the operating companies in rates that are so low that they eliminate competition in the terminal equipment market.

The deregulation of the terminal equipment business would apply to the providing of terminal equipment by all telephone companies in the United States. Deregulation is necessary in our opinion in order to eliminate the present time-consuming ineffectiveness and inability of the State regulatory commissions to redress predatory pricing and sales practices of the telephone companies with respect to telephone terminal equipment.

It is also necessary in order to eliminate the defense which the telephone companies immediately use in any antitrust action in Federal court, which is called the State action immunity defense.

This defense consists of claiming that by virtue of the fact that the telephone companies have to file their rates with the State regulatory agencies, those rates are immunized from antitrust attack on the basis that they are State action.

The State action defense introduces extreme delays in any antitrust actions in Federal court, and is a further impediment to full and open competition in the telephone terminal equipment market and to the obtaining of redress in the courts against predatory practices by the telephone companies.

Placing exclusive jurisdiction for the protection of the network from harm in the FCC is a very simple point. It is based on the simple proposition that, at present, many State regulatory commissions are studying the question of the need for interface devices; and this presents the clear threat of individual action by 50 State regulatory commissions with 50 different solutions; and the lack of uniformity that this would provide would be a further implement to free and open competition, and play into the hands of the Bell System, because it provides the potential for burdening the interconnect companies in selling across State due to the possibility of having to meet different standards in each State.

Therefore, we think it is clear that the whole question of protecting the network from harm must be placed in the Federal Communications Commission to afford a uniform action and solution.

Now there are a number of reasons—getting to Mr. Chumbris' question of a few moments ago—why in our experience the State regulatory commissions are not capable of preventing or providing redress against predatory pricing and marketing practices of the Bell System.

This discussion begins on page 20 of our statement. It continues through page 46. Basically the defects in the State regulatory system break down into five main points.

In the first place, a great many actions of the State commissions occur essentially, automatically, and without notice to the public. This is described in our statement.

Second, State regulatory commissions usually refuse to recognize or even consider the competitive effective efforts of pricing of marketing practices of the telephone companies.

Third, State regulatory proceedings are long, costly, and never ending.

Fourth, most State regulatory commissioners and staffs are actually biased in favor of the telephone companies. Many of them are openly hostile to allowing competition in the providing of telephone terminal equipment.

And fifth, most State regulatory commissions do not have sufficient experienced staff competent to appraise the Bell System methods or competitive practices.

The problems with the lack of notice to the public of actions by the regulatory commissions occur mostly with the setting of rates for new equipment or service offerings, or rates for additions of new features to existing equipment without increasing rates, or in reduction in equipment rates.

All three of these types of rate settings occur in the States through a process usually referred to as "filing an advice letter," which is nothing more than a letter by the telephone company to the commission proposing proposed new rates.

When the proposal is to add features to existing equipment without increasing the rate of the existing equipment, or where the proposal is to reduce rates, they can be filed by means of these advice letters which, universally among the State commissions, become effective automatically within 30 days.

There is the opportunity if you know about these advice letters—and there is never any notice, any public notice given of these

letters—if you should happen to find out an advice letter has been filed there is the opportunity to discuss the matter with the staff of the commission.

However, the staff is under no requirement to do anything about it. Our experience has been that virtually uniformly—or I should say almost without exception—these advice letter filings go into effect without any suspension or without any intervention of the staff.

MR. CHUMBRIS. Mr. Craver, a moment ago you were referring to a case before the Michigan Commission, and you have a quote in your prepared statement.

Now the other day, when Mr. Kelly was before us, I read a colloquy between Mr. Kinett and the same examiner, Examiner Sheridan. Examiner Sheridan made a statement for the record. He stated:

I have doubt in my mind whether the commission should even concern itself with any competitive effect of the rate structures presented by the applicant; in other words, I have a lot of doubt that we do not really care what the competitive effect is, at least a serious question in my mind and a serious question whether we should care what the competitive effect is if we find the rates to be reasonable. Now as I stated in the ruling on the interconnect petition for intervention, I said that I was allowing them in the case in order to make a more full and complete record in this case; and I just don't want any of my rulings along this line to possibly lull them to sleep.

After I read that, Mr. Kelly said—and I think I am quoting him accurately—"I agree with the examiner, that he did right in that ruling."

That is why I am raising my questions. In other words, the examiner has a question of reasonable rates for the consumers of that State: Whether he should consider whether competition should be more important, or whether what is in the best interests of reasonable rates. We have the same thing in the ICC.

The ICC law specifically states that there are four categories that the Commission must take into consideration: let's say of merger; the impact of the railroad workers; the economic effect; and the antitrust aspect is fourth among those specifically written into the law.

That is why I raised the question originally. We are talking about two different ballgames when we are talking about a public utility and when we are talking about an industry such as steel, automobiles, IBM, which happen to be in a competitive business.

MR. CRAVER. The thing that bothers me about the situation that you raise, Mr. Chumbris, is this: Whenever we have attacked the rates of the telephone company it's been on the basis that they have been anticompetitive, and the basis on which they are anticompetitive is that they are below cost.

Our problem is getting the State regulatory commissions to look at the costs of providing this telephone terminal equipment and make sure that those rates are not below cost, for the reason that if they are below cost it is not to the benefit of the public, as far as we can see, because it is meaning that the general ratepayer—which is the ratepaying public of the State—is paying for part of the cost of the telephone company putting that equipment in some business customer's premises.

Now, I don't know what can be fair about making the general residential public pay for installing business telephone equipment in businesses.

Mr. CHUMBRIS. On that point there is a dispute in testimony thus far. We will have more testimony on that point also.

The reason why we raise these questions is to throw this issue out and try to put it in focus so when we read this record we will understand you are right and how much the other fellow is right; if there is an area in between.

We have to resolve that. You were talking about selling below cost. This subcommittee had hearings in the middle 1960's when we had the Chairman of the Securities and Exchange Commission before us.

The issue was profit to the SEC. We were discussing conglomerate corporations at that time.

The conglomerate may have had five or six different entities within that conglomerate. Rather than each one of them reporting as to the specifics of each corporation, they lumped it all together into one report by the parent corporation. The theory—which was an inquiry of our subcommittee at that time—was should it be done that way or should it be done by each separate entity within that conglomerate structure.

The issue at that time was: Are conglomerates good? If you have a conglomerate and six of the divisions did well but three of the divisions did badly, and when you put it all in just one statement by the corporation the stockholder would never know that the conglomerate was carrying three bad divisions in that organization. That was only one of the purposes of the hearing.

We had analysts come in and testify at the time.

I would not say I am agreeing with the philosophy of what I am bringing out now, but I am telling you how the subcommittee had to look at that problem. We were not talking about regulated industries at that time but the general run of the corporate structure in this country.

That is why I am raising the question: Are you going to put the public utilities under a greater burden than the private sector which is not regulated?

Mr. CRAVER. I certainly would. I think there is a world of difference between the problem of a shareholder in a corporation and the problem of the customers out in the States who have to have telephone service.

A shareholder is a shareholder by virtue of a voluntary act. A customer has to have telephone service. Telephone companies come into the regulatory agencies and talk about the life line service and the problems of the infirmed who can't get out of the house.

You all know a telephone is not a luxury; it is a necessity. The only protection the public has against being forced to pay inordinately and unfair higher rates is the State regulatory commissions. If the State regulatory commissions don't force the telephone company to charge for the business telephone equipment on the basis of actual costs then they are allowing the phone

company to impose an additional burden on the residential rate-payers to make up the difference.

I would like to say that in that very decision of the Michigan Public Service Commission that you mentioned the staff admitted that the cost data on the terminal telephone equipment business of Michigan Bell was incomplete, and the commission admitted in its decision that it was faulty.

Now our point is: on the basis of admittedly incomplete and faulty information the Michigan Commission could not rule completely in the public interest in approving the rates that it did approve in that general rate case; and we have appealed that decision to the State courts in Michigan.

Mr. CHUMBRIS. I admire your tentacity in arguing. That is also good for the record. After all, if we are not going to bring up these questions, then we do not get your reaction to them and the record will not be complete. The issue doesn't only go to the shareholder; it also goes to the consumer. The point I was bringing up, is that the SEC was looking into it. The objective was to find out what the profits were in each division; also, what each division is basing its costs on to determine how it prices its different products and whether the consumer gets a good break out of it or whether there is selling below costs. That is one of the points Senator Long had in his bill back in the middle 1960's, the distribution bill. When you had dual distribution, there was a difficulty—as far as Senator Long was concerned—in determining the price that a dual distributor charged to his own subsidiary and the price that he charged to his processing customer. We have been down the road these last 17 years. You can't raise a question, Mr. Craver, this subcommittee has not looked into in these 17 years. I catch you coming and going in your papers. That is the point I have. I want you to be able to at least get back and say, "Look, Mr. Chumbris, you are dead wrong on this point." And try to convince me. We will get testimony just the opposite of what you are saying.

Mr. CRAVER. Well, Mr. Chumbris, if you are concerned about the area of the consumer, we are on the same side. You are fighting for the consumer and so are we. We are in agreement on that.

Mr. CHUMBRIS. Mr. Colter will say the opposite of what you are saying and he will say he is fighting for the consumer too. Mr. Nathan, who was to have testified yesterday, will say that the system that the A.T. & T. operates on now is in the best interests of the consumer; not only of the consumer, but of the Nation. We are getting two sides of the issue. That is the way it is supposed to be. You are trying to make it look one way and one way only.

Mr. CRAVER. Mr. Chumbris. I know A.T. & T. is perfectly capable of defending its position. I am just presenting the position for the consumer from the standpoint that we are in favor of it.

Mr. CHUMBRIS. As I say, I admire your tenacity. You may convince the record.

Mr. CRAVER. To get back to the problems of obtaining notice of commission actions with regard to new rates, we have even had a problem with obtaining what we viewed as public information by the commissions; I think the most extremely illogical example

of this occurred in Oklahoma when we attempted to obtain a certified copy of what was shown on the docket sheet of the Public Service Commission of Oklahoma, referred to as the court docket. We were prevented by the chairman of the commission from obtaining something as simple as that.

Throughout our experience in dealing with the regulatory commissions we have had the problem of staffs who are not sympathetic to competition; and that, of course, has led to the problem of presenting our information to the commissions on the effect of the telephone company's proposed rates.

In some States there is not even a provision for a hearing. I mean it is one thing to be able to present evidence to the staff of the commission, but it is another thing to obtain a hearing on some rates; and where the statutes don't even provide for a hearing then competition is clearly at a disadvantage and being throttled.

We note that many commissions refuse to recognize or even consider the competitive effects of pricing or marketing practices of the telephone companies. Mr. Chumbris has already brought up the problems we had in the Michigan rate case where, throughout the hearings, which lasted—well, the whole proceeding lasted approximately 11 months—we never knew whether the commission would recognize competitive effects of the telephone company rates. As this committee is well aware it is an established rule at the Federal regulatory level that the Federal regulatory agencies, the so-called alphabet agencies, must consider competitive effects as part of their public interest standard. The Supreme Court has ruled this in many, many cases. Yet when we come down to the State level we have no such authority; and as we cite in our prepared statement there is a long line of cases in the States to the effect that the State regulatory agencies do not have to consider competitive effects of utility companies' practices.

So that line of cases is directly contrary to the well-established rule at the Federal level that the Federal regulatory agencies do have to consider these effects as part of the public interest standard, which again gets back to Mr. Chumbris' question, and that is that the Supreme Court has ruled in all these cases that competitive effect is part of the public interest standard. When you talk about the State agencies acting in the public interest it is in consonance with the rule on the Federal level: They have to consider competitive effects in so doing.

Yet it has been impossible in a number of cases to get them to do this.

In our statement we detail the long, costly, and never-ending procedure in dealing with the State commissions in seeking redress against regulatory practices of the phone company. We detail the four major cases that we have underway or that we have been involved in; three major State commission proceedings and a major antitrust suit in Federal District Court in Houston, Tex., against Southwestern Bell.

One of the three regulatory agency proceedings involving the so-called 770A PBX. This began in September 1972 before the

California PUC when the Pacific Telephone Co. filed an advice letter proposing rates for this new PBX service.

We presented substantial evidence to the commission staff that the rates were too low to recover full costs, and we were at that time successful in having the commission suspend the proposed rates and order an investigation into it.

Five days of hearings were held in April 1973 during which we cross-examined a number of P.T. & T. witnesses.

At the beginning of the sixth day of hearings P.T. & T. counsel requested that the hearings be suspended while P.T. & T. conducted additional cost studies relating to the 770A.

Nothing happened from April 1973 until last month, at which time we were notified by P.T. & T. pursuant to the examiner's request that they consult with us during the course of their cost studies.

We were told that P.T. & T. had completed a new cost study on the 770A and we were presented with new rates that were indicated by the new cost studies.

We were told that Pacific was going to withdraw their old advice letter and eventually file these new rates.

Now, under PUC procedure this is normal procedure and we have no control over it.

We have been—since September of 1972 to virtually this month—litigating this case, and now that case has gone by the board and we may have to begin over again as a whole new case on the new rates.

The *Pacific Telephone General Rate* case before the California PUC was also engaged in by us. That case consumed the first 11 months of 1973 in hearings, and final briefs were filed in February 1974.

We cross-examined a number of witnesses and presented some direct testimony in that case relating to the key and keyless business extension telephone service of Pacific Telephone Co.

No decision in the case has been rendered, but a few months ago Pacific filed an advice letter with proposed rates on a new key service called the Com Key 718 which rates are substantially lower than the rates proposed by P.T. & T. in the general rate case, and litigated in that case.

Regardless of what happens in the general rate case with regard to Pacific's key telephone rates we will probably have to litigate it all over again because of the new service which is lower than the old service.

Also in regard to the *California General Rate* case there was no litigation of Pacific's PBX rates because they were based on cost studies which were years old.

The staff had recommended an across-the-board, 15-percent increase. We did not object to that, and neither did Pacific for the reason that Pacific was engaged in a completely new cost study on all of its PBX service, and they were going to propose a restructuring of that. There wasn't any use litigating it in that case because they were going to have to litigate it later anyway. As yet, that still hasn't been filed. That is still in the offing.

In the *Michigan General Rate* case—that was a relatively short case involving only about 10 months—we and other interconnect company intervenors extensively cross-examined Michigan Bell witnesses and presented direct testimony showing that the PBX and key telephone rates of Michigan Bell were below cost in a number of respects.

The decision of the Michigan Commission afforded no relief on rates, but it did direct the telephone company to substantially revise its accounting procedures so as to more clearly segregate the costs of providing business telephone service by Michigan Bell from the cost of providing its exchange service.

As I mentioned, we have appealed that decision, but it is still in the discovery stage.

In the meantime, Michigan Bell has filed another general rate case asking for four times the increased revenues they were asking for in the last case, and all of the issues raised in the last case are again relevant in the new case.

How that will ever be resolved remains to be seen.

Our Texas case—filed in April 1973—is still in the stage where we are attempting to have the court rule on the issue of whether the rates which are at issue in that case—it is not really rates, it is a tie-in practice by Southwestern Bell—are immune under the State action immunity doctrine.

Even though this case is a year old no decision has yet been rendered on this issue, which we think is a fair indication of the manner in which the telephone companies are able to use State regulation as a shield to, if not protect, at least delay any court action against their practices.

All of this litigation has engaged a three-man staff at Litton for at least 90 percent of its time over the last year and roughly three-quarters.

Our out-of-pocket expense on these four cases alone have been approximately \$101,000, just in travel, consulting fees, printing, telephone, and so forth.

This does not take into account the cost of the legal time which an independent company would have to bear if it were to engage in the same degree of legal effort.

Just last night I was doing some figuring and it turned out that on the basis of at least 90 percent of the time, for three lawyers, half a million dollars would be a fair value of that equivalent time if it had to be obtained from independent legal firms.

Thus Litton's experience before the State regulatory agencies has indicated to us these ways in which the State regulatory system actually plays into the hands of the telephone companies, and particularly the Bell System, in eliminating competition.

Obviously small companies trying to get established in this market could not possibly afford the time and the expense of engaging in litigation which has produced, at best, negligible results in almost 2 years.

In our written statement we note several public statements by State regulatory officials indicating they are not in favor of competition anyway.

We quote from statements by Mr. Nesbitt, chairman of the Oklahoma Corporation Commission, and Mr. Ben Wiggins of the Georgia Public Service Commission, who is also the president of the National Association of Regulatory Utilities Commissioners.

As Mr. Wiggins said, "Competition in any true sense simply isn't possible."

As Mr. Nesbitt said:

More utter nonsense has been promulgated and is being promulgated in the name of competition/antitrust these days than in the name of any other philosophy; and more actual disruption of our economy is being carried out in the name of this high-sounding word, competition.

We submit that when the State regulatory commissioners are openly so hostile to interconnect, and have shown that they have such strong views on the subject, that obtaining a fair and objective hearing is *prima facie* foreclosed to competitors.

We cite a number of examples which we believe are the most dramatic illustrations of below-cost pricing by the Bell System.

There is no need to go into all of them. They are set out, I think, clearly in the statement. I would note just one which I think is a very dramatic example, and that is the situation with regard to the 770A rates of Pacific Telephone. As I noted a few moments ago, hearings were held on the initial rates, after which A.T. & T. went back and conducted additional cost studies, and last month they came back with new indicated rates based on the new studies.

The comparison of the original rates with the new indicated rates is set forth in a table in our written statement for various typical system sizes. It can be seen from that table that there are extremely substantial increases in indicated rates based on Pacific's new cost studies.

For example, for the small system size listed—6 trunks and 35 stations—the monthly rate would increase from \$324.10 to \$394.50.

On the larger sizes listed, the monthly rate would increase from \$1,160.40 to \$1,790.10. Even more dramatic is the increase in the installation charge that would occur. In the case of the smaller size listed the increase would be over \$1,000, and in the case of the largest size listed the increase would be approximately \$6,000.

In contrast to this are the rates charged for the 770A by Southern Bell, which comparison is also shown in our prepared statement. This table shows that contrasted with the new indicated monthly rate for Pacific of \$394.50 for the smallest system size listed, the monthly rate for Southern Bell is only \$267.35.

For the largest size listed, Southern Bell's monthly rate is almost \$800 lower than Pacific's new indicated rate on the basis of its cost studies. Even more dramatic is the difference in the installation charge as can be seen from the table. Southern Bell charges only \$100 to put in the smallest system, whereas the installation charge based on Pacific's new cost studies is over \$3,000, and in the largest line size listed, Southern Bell's installation charge would be \$900, and Pacific's, almost \$14,000.

Obviously we don't know whether there is any connection, but it is certainly interesting to note that Georgia is in Southern Bell's territory and Georgia has as its chairman Mr. Wiggin's, who has

openly espoused A.T. & T. philosophy against competition, whereas the company serving his own customers is charging rates that are so ridiculously below the rates indicated on the basis of Pacific's latest cost studies.

We detail other predatory practices engaged in by the Bell System which include the charging of exorbitant rates for interface devices; engaging in tying practices which we mentioned is at issue in our suit against Southwestern Bell in Houston, Tex.; and applying of reciprocity pressures against customers who are likely to buy and install their own equipments or who are already discussing doing so with competitors; and the lowering of rates where competition exists and raising them where competition is weak or nonexistent.

I don't want to belabor the committee by going into all of these points, but I think the one that is very important for the committee to understand is the one regarding the interface devices.

It has been clear, in our opinion, from the cases, going all the way back to the 1956 court of appeals decision in Hushaphone, continuing through the court of appeals decision in Carterfone, which I believe was approximately in 1966, the FCC's decision in Carterfone, and of course most recently the decision of the California Supreme Court in the *Phonetele* case, that the telephone companies could not interfere with a user of the telephone network in his obtaining the maximum utility from the telephone network by using equipment that may not be provided by the telephone companies, but which is useful to him and which increases the utility to him of the telephone network, in the absence of causing actual harm to the network.

Despite the holding of all of those cases, as soon as the FCC, in early 1969 in its final decision in Carterfone, outlawed the tariffs prohibiting, outright, the interconnection of customer owned devices to the network, the telephone companies immediately began requiring interface devices without showing that the customer owned-and-provided equipment would cause actual harm to the network.

That practice, of course, has been picked up by the other telephone companies and is in universal use today.

However, because of the clear holding of these early cases that the telephone companies could only insist on a protective device, or an isolating device, if they first showed that the customer's equipment was going to cause actual harm, means that this long engaged in practice of requiring these interface devices has been a clear attempt to eliminate and to restrain competition; because they have done so without first showing any harm from these devices.

The degree to which these pieces of customer owned-and-provided terminal equipment do not cause harm has been clear and is becoming even more clear in the testimony which has been occurring in certain State regulatory commission proceedings.

For example, the California PUC has been engaging in an investigation of the harm question and the interface question; and the staff witness for the commission has filed his prepared testimony in which he shows that there has been no evidence of harm and that indeed the interface devices themselves cause substantial harm and inconvenience to the network. And there is clear evidence that the

interface devices that the Bell System and other telephone companies have been using are designed to be overly complicated and overly expensive with the result that the rates that are charged for these devices are so high that they are an actual impediment to competition.

I think the clearest case of this is shown with regard to the key telephone rates of Pacific Telephone in California. Pacific Telephone presently charges \$4.65 a month for any size of key telephone instrument called a call director; yet, the interface charge, if a customer wants to use his own key telephone equipment, is from \$4.25 to \$5.50 a month per line, depending upon the type of device used.

Thus the interface device costs more than the telephone company equipment. That means an independent interconnect competitor has to give his device away, practically.

All of this impediment to competition, as I noted, is in face of the fact that the telephone company has never shown the customer-owned equipment causes actual harm to the network; and they have never shown that customer owned-and-provided equipment ever has more potential for causing harm to the network than the telephone company's own equipment.

The fact is, as is shown in these PUC proceedings, that the equipment provided by Litton BTS and other interconnect companies to their customers is based on the same design as is utilized in the telephone company's own equipment, and is indeed manufactured under license from Western Electric and uses components that are manufactured under license from Western Electric.

So the short of it is that there is no more potential for causing harm to the network from the customer-owned equipment which is being used today than there is from the telephone company's own equipment.

As a final attestation to this fact we submit the additional fact that this same kind of equipment which Litton BTS and other interconnect companies are providing to customers of the telephone network is also supplied by the same manufacturers to independent telephone companies and is installed by them directly connected to the network.

In conclusion, the evidence based on our experience is that the Bell System is committed to maintaining the monopoly position it had in the telephone terminal market throughout the areas served by its operating companies.

We submit that our conclusion in this respect is based on the objective evidence of the pricing and marketing practices that they have been engaged in.

After all, it is a well-established principle in the antitrust field, as well as in other fields of law, that a person is presumed to intend the natural consequences of his acts.

Furthermore, with ownership of 83 percent of all the telephones in the United States, and comparable or greater shares of the long distance transmission and local exchange service, and with total integration into equipment manufacturing and supply the Bell System has overwhelming market advantages that allow the use of

many kinds of anticompetitive practices; that the State regulatory system is ineffective to deal with the predatory practices of the Bell System; that as long as the present structure of the telephone terminal market continues, new entry by competitors into the market will be limited and the companies now struggling to compete will exist only at the sufferance of the Bell System; that if there is to be a viable, effectively competitive telephone terminal equipment market, restructuring consisting of the four types that we have recommended is necessary.

We submit that our four-point plan is simple and would be relatively easy to accomplish, and that it would result in minimal dislocation to the Bell System.

No divestiture would be required; the operating companies would not lose the revenues from their terminal equipment business; business would only be separated into separate corporations; and Western Electric, while it would phase out of telephone terminal equipment manufacturing, would be free to use the additional manufacturing space and facilities to expand their other lines of equipment which they contend are so desperately needed to continue the expansion of the telephone network.

On the other hand, substantial public benefits would accrue. The State regulatory commissioners would be free to apply themselves to the traditional regulatory problems that they have been facing; and the benefits of competition in the telephone terminal equipment market would be assured to users of the telephone network.

We note that in our opinion the evidence is clear that competition is not contradictory to the objectives of telephone regulation, which are providing service to every possible customer at the lowest possible prices.

If competition is allowed to grow and thrive in the terminal equipment market there will be plenty of companies available to supply this equipment to all of the customers; and the normal interplay of competitive forces will assure that prices are as low as possible.

Furthermore, it should be noted that competition would provide the additional benefit of allocating resources in this market to the most efficient producers.

We submit that the present inability or disinclination of the State regulatory commissions to force the operating companies to price their services strictly on the basis of cost is contrary to the principle of allocating resources to the most efficient producers, because by not forcing pricing based on actual costs the commissions are encouraging inefficiency in the Bell System because they are allowing the Bell System to subsidize the low cost pricing by other revenues with the result that there is no incentive on Bell to compete on the basis of the best efficiency and the lowest prices derived therefrom.

As a final comment I would state that it is particularly frustrating for a company attempting to compete in the interconnect market and to provide customers of the telephone network with new and innovative products, service, and pricing alternatives to have to undertake substantial legal expenses in order to compete, which expenses are nonproductive from a standpoint of providing lower cost and

better service, while the utility companies opposing us so formidably on so many fronts are guaranteed to recover all of their costs of attempting to eliminate our competition in addition to earning a rate of return on their investment.

Thank you.

Senator HART. Thank you, both for a rather conclusive and effective summary and also for the basic doctrine of your testimony, much of which I have had a chance now to read.

Very early in your prepared testimony you describe the way you see the Bell System; and after describing it you say it is the greatest conglomeration of economic and political power of any corporate enterprise in the United States.

Why would Litton decide to take on that kind of animal?

Mr. CRAVER. I think the reason why we went into this business following the Federal Communication Commission's decision in Carterfone was that in the first place we had a substantial technological base from the fact that we had been engaged in providing, designing, and manufacturing communications equipment to the Defense Department; and second, when the market opened up as a result of the FCC's ruling in Carterfone we viewed it as having a substantial potential for providing new equipment to customers of the telephone network.

We felt that it was a natural area, a new business for Litton.

Senator HART. If you had it to do over again, would you do it?

Mr. CRAVER. Well, if they asked for my advice, I would have to recommend against it on the ground that the experience that we have had in competing against the Bell System, and in participating in the State regulatory actions, indicates, in my opinion, that the regulatory and competitive climate is adverse to competition to any significant degree in this market.

Now, that doesn't mean that I, personally, don't have hopes for the future. I think that in time these problems will be worked out, if there is enough effort put to it.

The problem is that there aren't very many companies around who can afford that effort on the basis of our experience in litigation in this area.

Certainly the small interconnect companies which probably make up well over 99 percent of all of them can't afford it; and there are few large companies that are in a position to do it.

I think that Litton is in a unique position, and I fear for the future because I don't see any other people in a position or able to do it.

Certainly hearings of this sort by this committee are, in my opinion, an extremely important tool from the standpoint of bringing the problems out on the public record, which, of course, is the heart of our whole system, so that they can be considered, and discussed, and the problems can be recognized.

I believe that this is important from a standpoint of achieving a remedy to the present system.

I would also hope that it would be important in inducing other companies to either singularly or collectively band together and institute and carry on the kind of legal effort that our experience indicates is necessary.

Of course, there is always the hope of legislation.

Senator HART. Indicative of the fact that you intend to continue marketing your interconnect equipment, you explain that you are engaged in forming a network of authorized independent distributors located in the major metropolitan centers, which I take it would supplement or be an addition to the implementation of the service operations that you now engage in directly; is that correct?

Mr. CRAVER. Yes, Senator.

To explain a little bit more in detail, we, at the beginning of our business, which, as I mentioned, was in 1970, started by establishing a number of direct branch sales and service operations in what we thought at that time would be major markets around the country.

I forget the exact figure—approximately 15 States at one time, with direct branch and service operations.

However, because of the adverse regulatory and competitive climate we have since had to contract our business and we have closed our direct sales operations in all States but California.

We will maintain direct service operations to service equipment that we had installed.

So, at the present time we are direct in California in sales, with service operations elsewhere; and we are attempting now to establish a system of distributors who would be independent businessmen, but with whom we would work in encouraging them and helping them to sell terminal equipment which they would purchase from us.

Senator HART. That change then to a franchise formula imposes, at least initially, costs in excess of what you would have incurred had you stayed with the 15 or more direct distributors; is that true?

Mr. CRAVER. It does, from the standpoint of constituting a substantial expense by virtue of closing these branches.

There are leases that have to be brought out, and things of that sort.

The contraction is always an extremely expensive procedure.

On the other hand, for the future we expect that the processes of operating through independent dealers will result in some cost economies as opposed to the former branch operations.

Mr. CHUMBRIS. Mr. Chairman, may I make one point?

Mr. Craver, you were noting the costs aspect, \$500,000, I believe you stated. It might have been something that might discourage others.

Well, when we had the Snap-On Tool people before us, during the franchise hearings in the middle 1960's, the legal costs, as testified to by the president of the company, were \$250,000; and they fought the case, whereas other companies who didn't have the resources, took a cease-and-desist order.

The Schwinn Bicycle Co. faced the Justice Department suit against them. It cost them \$400,000 to fight. They won it in a lower court, but unfortunately lost it in the Supreme Court. That \$400,000 was only in the lower court.

What the costs were ultimately, through the Supreme Court, we don't know.

You can see that you are not alone just because you have to go from commission to commission. We have businessmen every day who face similar problems from Government agencies.

As a matter of fact, Mr. Timberg, one of the key witnesses that appeared before us over the years and who was formerly with the Department of Justice, stated that one of the unpleasant things about consent decree in the Justice Department was that many people were going ahead and accepting the consent decree, even though they knew they did nothing wrong; but because of the turmoil within the company and the court costs they just went ahead and accepted a consent decree.

That is one of the problems this subcommittee has wrestled with, also as to what to do about the constant device system.

I sympathize with the fact you have those cost problems. There are a lot of businessmen around the country, big, small, medium-size, who have to face the same problem.

Mr. CRAVER. Yes.

Mr. CHUMBRIS. I have no further questions of this witness, Mr. Chairman. I have already had my say.

Mr. CRAVER. If I might just add a postscript of agreement to what Mr. Chumbris said. We face substantial legal expenses in many legal areas. I always sympathize with the small businessmen that you just mentioned, who can't afford the legal expense.

They have to either go out of business or accept a consent order when they really feel they did nothing wrong. That is what the problem is, as I see it, in this industry.

The great bulk of the interconnect companies are too small to afford these expenses.

Senator HART. Mr. Hellerman?

Mr. HELLERMAN. Thank you, Mr. Chairman.

Mr. Craver, I will assume it is your opinion that Bell is using its power to eliminate competition. Do you think that that action is a decision of the operating companies or a decision by both the operating companies and A.T. & T. management?

Mr. CRAVER. Well, we have had limited experience in trying to trace the chain of communication between A.T. & T. and the operating companies. Others have had much more experience than we; and I could only comment essentially on the basis of evidence that I have heard about, that has been developed by these other endeavors; but again, to me, as a lawyer, the clearest evidence is the objective facts; and to me, the objective facts that these practices are engaged in indicates to me that they must be intended, because I can find no justification for the practices.

For example, the interface charge. I can find no justification on this basis of causing harm to the network or on the basis of electrical principles of the network to, one, require these devices at all; and two, require devices that are so overly engineered, overly complicated, overly constructed, and contain so much redundant capacity in them that they are priced at such a high price and which, as the evidence shows, do not protect substantially against harm to anyone.

Now to me, the facts of this indicate that this is part of the plan. I would have to conclude there must be a scheme or plan involved here from the top down.

I think the public statements that Mr. deButts made—which are, as I view, pretty adamantly opposed to competition in any form—

indicate the feeling, or at least the inclination, on the part of A.T. & T. with regard to competition.

Senator HART. I, with apologies, have to interrupt for a brief recess. That is the second notice of a vote.

[A brief recess was taken.]

Senator HART. The committee will come to order.

Mr. Hellerman?

Mr. HELLERMAN. Are you familiar with the recent action taken by the North Carolina Commission?

Mr. CRAVER. I assume you are referring to the proposed rule-making regarding allowing or disallowing the interconnection of customer-provided equipment to the network?

Mr. HELLERMAN. That's correct, Mr. Craver.

Mr. CRAVER. Yes, I have been following that.

Mr. HELLERMAN. Would you indicate for us what that action was?

Mr. CRAVER. Well, the action was initiated by the publication of a proposed rule by the North Carolina Public Utilities Commission.

I forget the exact date that they proposed the rule, but it was approximately 6 or 8 months ago.

That rule would have, after a date specified therein, which I believe was December 31, 1973—I may be in error on the date—the interconnection of customer owned and maintained equipment in the State of North Carolina would have been prohibited; and a number of people filed interventions, including Litton. Some evidence was taken. In fact, I have a copy of the latest proposed rule here.

Just on the 12th of June the Commission issued an order to another proposed rule which would have substantially changed the provisions of their initial proposed rule; and I assume that their changes are a result of the action of the Federal Communications Commission in its *Telerent* decision which held that attempts by State regulatory agencies to ban or interfere with the connection of customer owned equipment to the telephone networks, except as to prevent harm, would conflict with the primary jurisdiction and authority of the Federal Communications Commission.

Mr. HELLERMAN. One of the proposed orders is a prohibition against terminal equipment as of June 30, 1975; is that correct?

Mr. CRAVER. Well, the new rule which came out on June 12 specifies that from and after June 1, 1975, no telephone public utility doing business in North Carolina shall allow interconnection to its telecommunications system, customer owned or provide station apparatus or terminal equipment consisting of PBX, key equipment, and peripheral devices.

Mr. HELLERMAN. What effect do you think that rule will have on the interconnect companies in the State of North Carolina?

Mr. CRAVER. Well, I don't believe it will have any effect.

The rule, and the entire action of the commission, is really a nullity. I think the proposed rule on its face shows it is a nullity.

It is really, I think, based on the actions of the commission in this whole case, an attempt now by the commission to try to get out from under the burden of a proceeding which it knows will never go anywhere.

The reason I have this opinion is because in the first place the FCC in *Telerent* has clearly said any attempt by the North Carolina Commission of any other commission to ban interconnect conflicts with the Federal supremacy of the FCC in this area.

Second, the provisions of the North Carolina Commission's or proposed rule, specifically excludes any application to the direct connection of customer owned equipment used in interstate communications.

Therefore, because of the simple and elementary fact that it is physically and electrically impossible to segregate intrastate communications from interstate communications conducted over any customer's telephone, the exemption of the proposed order to the connection of customer owned equipment used in interstate communications nullifies the entire ban of the order.

Mr. HELLERMAN. Thank you, Mr. Craver.

In your statement earlier you many times made mention of State commissions and the problem of staffing.

I would like in the record to have at this point a report prepared by the Library of Congress, which is actually a survey of regulatory agencies and commissions throughout the United States which determined the number of professional employees, lawyers, financial analysts, and engineers involved in regulation of the communications industry.

The 48 State agencies and commissions that did respond to the survey indicated that they employed a total of 459 full-time and 177 part-time professionals to regulate this industry.

Senator HART. Very well.

[For the above information see exhibits 2 and 3 at the end of Mr. Craver's oral testimony.]

Mr. HELLERMAN. You also mention difficulties of being heard before State commissions. I would like to introduce into the record a petition to suspend proposed tariff and complaint as to proposed tariff filed before the Illinois Commerce Commission.

The effective date of the tariff in question was to be November 25, 1973.

On the face of the petition it is stamped Illinois Commerce Commission, November 21, 2:15 p.m., 1973, Public Utilities Regulation.

Then there is a two-lines crossing out the stamp with the handwritten notation, "Void."

Then there was a letter from J. W. Kissel, Jr., chief telephone engineer of the Illinois Commerce Commission, explaining that the Illinois Commerce Commission had already determined to approve the tariff.

[The petition and letter referred to appear as exhibit 4 at the end of Mr. Craver's oral testimony.]

Mr. HELLERMAN. Generally speaking, do you find rates for telephone equipment and services are similar from State to State; and if not what would be your opinion as to the reason for the differences?

Mr. CRAVER. No; we do not find that the rates are similar from State to State, and I pointed out several examples in my direct testimony where rates are dramatically dissimilar.

For example, the 770A rates between Southern Bell and those that were proposed for the 770A in California.

Another example would be the key equipment rates between Pacific Telephone in California, which are—as I mentioned—uniformly \$4.65 per instrument regardless of size; whereas in Michigan, for example, the rates range from approximately \$5.50 a month to \$18.50 a month depending on size of the key telephone instrument called the Call Director.

There is even a tremendous variation in rates for the Bell System's newest key telephone system called the Com-Key 718 to which I referred.

The rates in California, at present, are substantially lower than the rates for the same equipment in States such as New Jersey and others.

As to the reason for these disparities in rates I can only express the opinion that based on the experiences we have had and the evidence that we have seen, it would seem to me that the rates vary in accordance with competitive conditions.

For example, in California the key telephone rates of Pacific Telephone, up to approximately 1966, were the same as the rates in other States. However, in 1966, when several companies were eliminating a lot of key telephone service of Pacific Telephone, by offering customers a simple intercom system—which were then not connected with the network—Pacific adopted the present key telephone service which virtually eliminated that intercom business.

In Southwestern Bell's area, as another example, up until the Commission's decision in the *Carterfone* case, which was final in early 1969, Southwestern Bell was providing its PBX service under a so-called series 300 rate, which was virtually identical to other series 300 rates in effect by other operating companies throughout the country.

However, immediately after the FCC's decision in the *Carterfone* case became final, Southwestern Bell adopted a new series 300 so-called package rate under which the telephone lines to the customer were included with the rate for the equipment—the terminal equipment—and no extra charge.

Southwestern Bell was the only operating company that instituted this package rate. The effect of the package rate was a dramatic reduction in rates to business customers who used Southwestern Bell's PBX equipment because they got all their lines for nothing; whereas, for example, customers of Southwestern Bell who used their own provided and maintained terminal equipment had to pay the normal line charges of approximately \$20 a month per line.

Incidentally, that practice is the one we are attacking in our suit in Federal district court in Houston against Southwestern Bell.

So I think the evidence indicates that these rates change and practices change in accordance with competitive pressures.

Mr. HELLERMAN. I have only two more questions.

Would you just discuss, very briefly, who bears your legal expenses of the regulated utility?

Mr. CRAVER. Well, since I am an in-house counsel of Litton Industries, as are my two associates, the cost of our time and effort is borne by the corporation.

Mr. HELLERMAN. In other words, the stockholders?

Mr. CRAVER. This comes out of our profits. It is just an expense of doing business which is charged against our revenues and becomes part of the profit and loss of the company, which the shareholders bear; that is right.

On the other hand, the expenses of the telephone companies are part of their normal expenses which are recovered through their rates to the telephone users.

In other words, the way they determine their income is the expenses are deducted from the revenues, and then there must be a profit.

The profit is applied to the plant investment to determine the rate of return.

Therefore, under that system, they are guaranteed to recover all of their expenses; and in addition earn a rate of return.

Mr. HELLERMAN. Thank you, Mr. Craver.

Mr. CRAVER. I would conclude that their expenses are subsidized by the telephone ratepayers.

Mr. HELLERMAN. In your statement, you include a quote by Mr. Goldstein, A.T. & T.'s director of product management. In your opinion would a fair translation of that statement be that Bell was being forced by competition to offer equipment which the public wants, and that absent any alternative source for equipment the subscriber would have to wait until Bell decided to offer that product?

Mr. CRAVER. Well, the statement does indicate to me that the official who is making the statement is admitting that Bell is being forced to expand its product line by the competitive offerings of companies like Litton BTS and other companies in the interconnect business.

He is saying, as I interpret it, that they are going to supply those products in whatever way they can; but that they must have them because of the competition.

To me that is a benefit of competition, because obviously, before competition occurred in this market, which began with the FCC's *Carterfone* decision in early 1968, Bell had a complete monopoly in the providing of telephone terminal equipment in its service areas; so that at that time it was in the position that Henry Ford was in when the automobile business began and he was able to say, "You can have any color you want as long as it is black."

Today, thank goodness, in my opinion, that is not the case in terminal equipment, as long as we can have a viable and effectively competitive market.

Mr. HELLERMAN. To summarize your opinions as regards regulation, you are neither for State regulation or Federal regulation of the terminal equipment market and would rather have the market forces be the regulating mechanism for that market?

Mr. CRAVER. Absolutely; yes.

In our experience, there is absolutely no justification for continuing State or Federal regulation of the telephone terminal equipment market. Indeed, as one of the main points of my statement here, the evidence shows conclusively to us that there should not be a continuation of regulation for this market for the reason that the

existing system of regulation is ineffective, and indeed plays into the hands of the Bell System in eliminating the competition; and that competition is feasible in this market if the artificial restraints are removed; and that competition is not contrary to the standard regulatory principles of allocating resources and providing the widest range of service at the lowest price; and indeed that competition is the only way, because of the infirmities of the regulatory system, that this can really be accomplished in this market.

Mr. HELLERMAN. Thank you very much, Mr. Craver.

I have no further questions, Mr. Chairman.

Senator HART. Mr. Granfield?

Mr. GRANFIELD. First of all, let me extend a warm greeting to you, based on our previous association at the UCLA Graduate School of Management.

I have a few questions for you, with the idea of trying to balance the record here this morning.

Let me give you a hypothetical, although not long ago it wasn't really hypothetical for Litton Industries.

Let us assume the Justice Department announced it is going to begin litigation against Litton to force Litton to divide itself along the 14 percent lines mentioned in the initial parts of your statement.

What do you think would be the reaction of the securities markets to such an announcement by the Justice Department?

Mr. CRAVER. Well, I would, of course, have to conclude that a suit with such a far-ranging and broad purpose of essentially structuring the entire operations of Litton Industries would initially, at least, result in some unsettlement to the market for Litton stock.

I am a little ambivalent because history has shown that in many instances the mere filing of a suit doesn't cause too big a ripple in the stock market.

But if the point of your question is a comparison between the effect of that with the effect of the proposed restructuring that I have presented today, then there are many more experts around than I who could predict the effect on the stock market.

I would only emphasize that if it is analyzed objectively, I don't believe that our proposed restructuring is anywhere near as broad and far reaching as the kind of restructuring of Litton Industries that you have just suggested, because as I pointed out, the operating companies would not be ordered to divest their terminal equipment business. It would only be segregated for business, administrative, and accounting purposes. They would not lose the revenue.

Second, Western Electric would not be affected with a predominant portion of its business. The figures that I have seen indicate that the telephone terminal equipment business is roughly between 5 and 15 percent of the Bell System's total business.

If you apply that same percentage to Western Electric you would be faced with the proposition of a relatively very small effect on Western Electric which, in turn, would be offset, I think it is reasonable to expect, by an expansion of Western Electric's other business to meet the needs for more equipment for the telephone network.

On the other hand, you would have a whole new industry of independent companies appearing, plus an expansion of telephone

equipment manufacturing by the companies already in the business to fill up the slack.

Mr. GRANFIELD. My point, Mr. Craver, and you don't have to respond, is that I would like to cast some doubt on the notion that this could be easily accomplished at very little cost.

I would venture that the cost to permanent stockholders of A.T. & T. might be quite severe, at least in the short run. I think any move to divest Western Electric from A.T. & T., should be an extremely serious consideration and should not be glossed over.

You also indicated, I think, there is serious cross-subsidization occurring within the pricing of telephone equipment services. Isn't cross-subsidization a rather common practice, for example, in retailing?

That in and of itself is a rather common business practice; is it not?

Mr. CRAVER. I can't agree that it is a common business practice, but I would state that there is a very big difference and a very fundamental difference between the kind of cross-subsidization that I am referring to within the Bell System and the kind you are referring to of sales loss leaders.

The basic and fundamental difference is that when the Bell System does it they are using, in effect, their monopoly over exchange and long-distance telephone service to subsidize the below-cost pricing in the competitive market for terminal equipment, which constitutes the use of their monopoly power in one market to eliminate competition in another market; and this, in turn, is a very solidly recognized, anticompetitive practice in a number of cases in the antitrust field decided by the Supreme Court and numerous Federal courts.

Mr. GRANFIELD. From what I understand in your testimony, you will soon have a court ruling on that allegation on your part. It seems to me that by demanding or suggesting divestiture of Western Electric you have already prejudged the guilt of A.T. & T. with respect to predatory price cutting.

Mr. CRAVER. I base that on two points, really.

One was the evidence from the FCC's 1939 monumental report, as well as evidence that we have run into in the litigated cases that we have had; plus the very fact that the accounting system itself is, on the basis of the evidence, incapable of being segregated between the terminal equipment products and the other products; and that because of the accounting system being so complicated and so unorthodox as found by the FCC, it is totally without the realm of the State regulatory commissions as well as the FCC, itself, to sort it out and determine the actual costs of providing this telephone terminal equipment.

Therefore, it seems to us the only solution that if we are going to have something done before we are all dead and gone we have to simply have them phase out that business. To me it's the only practical solution.

Mr. GRANFIELD. You stated this cost system hasn't changed in 40-some years. You say it varies, the common system, at least in part.

Yet, this common system was instituted when there wasn't the *Carterfone* decision. It seems to me that the accounting system was set up for internal decisionmaking processes at A.T. & T. where there was no predatory system.

It seems to me there may be an inconsistency there.

Mr. CRAVER. What you say, of course, is absolutely true. It was set up decades and decades ago. Our point is simply that the conditions now are totally the reverse of what they were then, and the accounting system now is no longer satisfactory.

Mr. GRANFIELD. One final question, Mr. Craver.

You have noted that prices change with competition across the Bell System. Do you see anything wrong with that? Isn't that what we expect? Don't we want prices to adjust to competitive conditions?

Mr. CRAVER. Certainly.

Prices have to adjust in the competitive system. The point that we make is that prices are adjusted without regard to costs. The regulatory system has not held them to costs. The prices are so low on the basis of the evidence that has been adduced, that they are way below cost. These prices are the ones that are eliminating competition, and which the regulatory agencies so far have been incapable of redressing.

Mr. GRANFIELD. Thank you, Mr. Craver.

Thank you, Mr. Chairman.

Senator HART. Mr. Craver. All of us appreciate very much the testimony you have given us.

Mr. CRAVER. Thank you, Senator Hart.

I certainly appreciate the request to appear here today.

Senator HART. We will now recess until 4 p.m.

[Whereupon, at 1:15 p.m., the hearing was recessed, to reconvene at 4 p.m., this same day.]

[The following was received for the record. Testimony resumes on p. 3805.]

MATERIAL RELATING TO THE TESTIMONY OF THEODORE F. CRAVER

Exhibit I.—Prepared Statement of Mr. Craver.

PREPARED STATEMENT OF THEODORE F. CRAVER, DIRECTOR OF TRADE REGULATIONS, LITTON INDUSTRIES, INC., BEVERLY HILLS, CALIF.

I. INTRODUCTION

Mr. Chairman and members of the Subcommittee, I am Theodore F. Craver, Director of Trade Regulations for Litton Industries, Inc. ("Litton"). I am responsible for the regulatory and antitrust legal work pertaining to the operations of the Business Telephone Systems Division ("Litton BTS") of Litton Systems, Inc.

I am honored at being requested to appear before this committee today. On behalf of myself and my colleagues at Litton Industries and the Litton BTS Division—as well as other so-called telephone interconnect companies around the country—who have been struggling to offer new and innovative product, service, and price alternatives to customers of the public telephone network in competition with AT&T and the Bell System, and to a lesser extent the General Telephone System, I am also deeply appreciative of the opportunity of placing before this subcommittee facts which are consistent with S. 1167, the Industrial Reorganization Act.

It is my understanding, and the premise for the offering of my testimony, that this Act seeks to achieve through structural and other remedial proposals,

a realignment of seven industries, including "Communications and Computer," in accordance with the principle that competition shall be the regulatory mechanism of our economy.

In my appearance today, I shall address myself only to the communications industry, and only to the telephone terminal equipment segment of the communications industry. This segment is no small industry, however, with total revenues reaching approximately \$1.75 billion a year, on the basis of sales value of new installations, according to knowledgeable estimates.¹

II. THE BUSINESS OF LITTON INDUSTRIES AND LITTON BUSINESS TELEPHONE SYSTEMS DIVISION

The telephone terminal equipment market consists of the manufacture and supplying of telephone terminal equipment—i.e., private branch exchange (PB- and PAB-) and key telephone systems and associated peripheral devices, such as speaker phones, answering devices, toll call diverters, etc.—generally installed on customer's premises and interconnected with the public telephone network.

Litton entered the telephone terminal equipment market in 1970 when it began offering a full range of customized, telephone and voice communications systems for business offices, schools, hospitals, and other customers of the public telephone network.² Litton's entry into the telephone terminal equipment market was made by the Litcom Division of Litton Systems, Inc. The Litcom Division was organized in 1963 as the communications branch of Litton Industries. Litcom specialized in the research, development and manufacture of communications, telecommunications, radio navigation and shipboard electronic systems and products.

In the years since its formation, the Litcom Division has developed a broad range of military and commercial communications systems equipment and has made significant contributions to radio navigation and to electronic switching, monitoring and control equipment, and state-of-the-art communications componentry.

In the course of its development, Litcom became one of the chief suppliers of telephone communications equipment to the Department of Defense, including portions of the Outovon military and diplomatic worldwide communications network. This network combines approximately 30,000 Armed Services and FAA communications lines through electronic switching. Litcom also is a major supplier of communications equipment to the U.S. Government's Omega navigational network. Litcom also entered the broader field of telecommunications and developed a completely electronic frequency division multiplex system. In a related development, Litcom produced a novel and advanced time division multiplex switching system. Litcom designed and installed a sophisticated communications network of this type in the new Dallas-Fort Worth airport.

By early 1973, Litcom's activities in the field had grown substantially, and Litton BTS Division was established as a separate division to conduct the telephone terminal equipment business.

In the telephone terminal equipment market, Litton BTS supplies telephone equipment that is compact, adaptable, and tailored to individual customer needs, offers more features, and is often less costly to operate than systems offered by most U.S. telephone companies. The BTS line includes full featured, customized private automatic branch exchange systems capable of handling up to 3,000 and more extension numbers, as well as LITKEY® desk top key telephone systems for small offices requiring as few as ten or less phones.

BTS has inaugurated several innovations and new equipment offerings in the telephone terminal equipment market. For example, BTS recently introduced the LITKEY II, a compact multi-extension key telephone system featuring a built-in Answer-Back intercom with two-way conversation capability and a

¹ Stanford Research Institute, Report on the Interconnect Industry, January, 1974.

² This committee, through prior hearings, is well aware of the history and attempted development of competition to the telephone companies in the supplying of telephone terminal equipment since the ruling of the Federal Communications Commission on June 26, 1968 in the famous *Carterfone* case—*In the Matter of Carterfone*, 13 F.C.C. 2d 420 (1968)—that the tariffs prohibiting the interconnection of customer-provided equipment were "since their inception . . . unreasonable, unlawful and unreasonably discriminatory . . ." and that such tariffs "be stricken and not thereafter be punished or given any effect." *Id.* at 426. Therefore, we shall not burden the committee with a further dissertation on this subject.

new toll restriction device to restrict use of individual telephone stations to local calls. BTS also will begin manufacture of, and introduce this summer, the "Twin-Phone," a new advanced telephone system which allows one to receive and place a second call while already on an existing conversation.

Litton BTS' sales volume is approximately \$20 million, at an annual rate. The division markets its telephone terminal equipment products and services through its own installation and service operations in several major markets and is presently engaged in forming a network of authorized independent distributors located in major metropolitan centers. The division maintains its own service offices and personnel.

As a division of Litton Industries, Litton BTS is part of an industrial corporation with total worldwide sales in fiscal year 1973 of \$2.5 billion, with approximately 106,000 employees. Litton was founded in 1953 as a small California-based electronics firm, employing 300 people, with sales of \$3 million in its first fiscal year. Today, Litton has approximately 135 major divisions producing and selling thousands of different products in twenty-seven countries.

Litton's current business base is comprised of fourteen major product areas: business machines and systems; retail and revenue systems; typewriters and office copiers; specialty paper, printing and forms; business furnishings and fixtures; navigation and control systems; electronic communications and data systems; marine engineering and production; machine tools; material handling; electronic and electrical components; medical and electronic products; educational and professional publishing and resource exploration.

Communications and electronic data systems represent a major segment of Litton's business, accounting for \$207 million in sales during fiscal year 1973. In this field, Litton serves information systems, electronic reconnaissance, and computer software markets. Of Litton's customer groups in these markets, about 90% are Government defense agencies.

From this description, it can be seen that Litton is not in the business of providing "telephone service." Litton BTS does not offer private line transmission service, common carrier transmission service, central office exchange service, or the provision of telephone operator services. Rather, Litton BTS is in the business of selling telephone terminal equipment in a marketplace which is an economically and technically distinct market. Accordingly, we are not here to address ourselves to the problems of other aspects of the communications industry, such as private line services; nor do we make recommendations regarding that or other aspects of the communications industry. We are here only to present the problems besetting the telephone terminal equipment market and to make recommendations thereon.

III. RECOMMENDATIONS FOR NEEDED RESTRUCTURING OF THE TELEPHONE TERMINAL EQUIPMENT MARKET

Based on our experience in trying to sell telephone terminal equipment against AT&T and the Bell System, and our experience in appearing before state public utility commissions in attempting to obtain redress against Bell System predatory pricing and sales practices, we have become convinced that if the telephone terminal equipment market is to become a viable and effectively competitive market, there must be a substantial restructuring of the market.

The fact that the Bell System controls 83%³ of all the telephones in the United States, combined with its complete vertical integration of providing telephone terminal equipment, local and long distance telephone exchange service, and telephone equipment manufacturing, makes it the greatest aggregation of economic and political power of any corporate enterprise in the United States. The market power stemming from the Bell System's size and integration, combined with the state regulatory system and its delays, inefficiencies, and ineffectiveness—as described later in our statement—and the power of the Bell System to take advantage of and to manipulate the state regulatory system—also described later—give the Bell System the power to eliminate effective competition as it chooses. For this reason, in our opinion, if substantial restructuring is not accomplished, there will never be a viable, effectively competitive market in the furnishing of telephone terminal equipment to customers of the telephone network. Competition will not expand beyond its present level of a

³ See, e.g., *Telephony Magazine*, issue of February 11, 1974, at p. 41.

number of small, fragmented interconnect companies subsisting at the sufferance of the Bell System. The evidence today shows that competition with the Bell System in the telephone terminal equipment market is already declining substantially, as shown by the bankruptcies and disappearance of a number of companies within the past six months.⁴ Without substantial restructuring, Bell will be free to continue to use its overwhelming power and the state regulatory system to reduce its rates to the level necessary to prevent competitors from growing to a size which would seriously threaten any of the Bell operating companies.

The restructuring of the industry which we have concluded is necessary in order to establish the basis for a viable and effectively competitive telephone terminal equipment market includes the following:

A. Phase Western Electric out of the manufacture of telephone terminal equipment over five years.

B. Place the telephone terminal equipment operations of the Bell System operating companies into separate corporations with separate officers and directors and books of account, as was done with the Service Bureau Corporation of IBM in 1956, as a result of an antitrust suit by the Government. (*U.S. v. IBM*, 1956 Trade Cases, Para. 68,245 (S.D. N.Y.)).

C. Deregulate the sale and lease of telephone terminal equipment.

D. Place the responsibility for protecting the telephone network from harm within the exclusive jurisdiction of the FCC.

IV. THE REQUIRED STRUCTURAL CHANGES ARE SUPPORTED BY PRECEDENT, WOULD BE RELATIVELY EASY TO ACCOMPLISH, AND WOULD NOT RESULT IN SUBSTANTIAL UPHEAVAL OF THE TELEPHONE INDUSTRY.

A. Phase-out of telephone terminal equipment manufacturing by Western Electric

The structural changes recommended here are not drastic divestitures and mechanically would be relatively easy to accomplish. They are changes that can be achieved with a minimum of accounting and management change within the Bell System. For example, the phase-out of telephone terminal equipment manufacturing by Western Electric could be accomplished through a simple requirement that the Bell System operating companies reduce their purchases of telephone terminal equipment from Western Electric by 20% each year. This would gradually shift the operating companies to purchasing their terminal equipment from independent manufacturers and dramatically open the manufacturing of this equipment to a whole new industry of manufacturing firms, in comparison to the few firms presently existing.

The phase-out of manufacturing telephone terminal equipment by Western Electric for the operating companies is necessary in order to stop below-cost pricing of this equipment and the subsidizing of such below-cost prices by higher than necessary prices for other equipment at the Western Electric level. As explained later in our statement, there is substantial evidence that terminal equipment is being priced below cost at the Western Electric level. By virtue of the vertical integration of the Bell System into supplying telephone terminal equipment to customers of the telephone network and in manufacturing that equipment at Western Electric, below-cost pricing of this equipment at the Western Electric level allows the operating companies to charge rates for this equipment which interconnect competitors cannot meet.

Our experience shows that the state regulatory commissions are not capable and not inclined to regulate the prices charged by Western Electric to the Bell System operating companies for terminal equipment. One problem is that the cost accounting system at Western Electric is so contrary to normal cost accounting procedures⁵ that it is simply beyond the capacity of the state regulatory commissions and even the FCC⁶ to understand and to regulate. Even if Western Electric's system could be analyzed and understood by the regulatory commissions, the costs of manufacturing the terminal equipment could not

⁴ See, e.g., *Telephony Magazine*, issue of April 29, 1974, at p. 63.

⁵ These were conclusions of the FCC staff in the Commission's monumental 1939 report on the Bell System, made at a cost of \$1.5 million as one of the first acts upon the Commission's formation. See FCC, *Investigation of the Telephone Industry in the United States*, H.R. Doc. No. 340, 76 Cong., 1st Session (1939) pp. 284-321. Our cross-examination of Bell's witnesses in rate cases shows the accounting procedures used then are used today.

⁶ This is indicated by the FCC's lengthy, on-again, off-again, and presently on-again, attempt to again study Western Electric's costing and pricing practices.

effectively and accurately be segregated from the cost of manufacturing exchange and other equipment because of the maze of accounting groupings and allocations. Indeed, the heart of the system is the lumping of terminal equipment with product lines of long lines and central office equipment. It is our conclusion that the only solution for stopping the Bell System from using the market power of its vertical integration to eliminate competition in telephone terminal equipment is to eliminate that integration by requiring the phase-out of terminal equipment manufactured by Western Electric.

The benefits of opening the terminal equipment manufacturing market to the entry of new firms would be significant. In the first place, the market would be opened at state-of-the-art levels of technology. To gain the full benefit of this, it is important to require the phase-out over the most expeditious period of time. Five years is recommended on the belief that this is time enough to allow the expansion of existing firms and the entry of new firms sufficient to satisfy the new equipment needs of the Bell System operating companies. The relative speed of the opening of that market would insure entry premised on the manufacture of the most advanced and functionally efficient equipment, utilizing the simplest and most modern componentry and manufacturing processes. This would result in new and innovative equipment which, through the use of the most modern technology, potentially would produce cheaper, lighter and more useful equipment. For example, the heavy and bulky telephone set which has remained unchanged for decades would no doubt be replaced by a small, light solid state instrument.

B. Separating the terminal equipment business of the operating companies into separate corporations

The establishment of separate corporations to handle the marketing of telephone terminal equipment by the Bell System operating companies also can be accomplished through a relatively simple process of personnel, record, and accounting transfers. As noted, the same procedure was followed to accomplish the separation of IBM's service bureau business into the separate Service Bureau Corporation in 1956-1957 as a result of the consent order entered in a Government antitrust suit against IBM.⁷ In that case, IBM was ordered to establish a separate corporation to handle all of its service bureau business within one year after entry of the consent order. Salient points of that order with respect to separating the Bell System's terminal equipment business are:

a. The separate corporation was wholly owned by IBM, but IBM was thereafter enjoined from engaging in the service bureau business.

b. The Service Bureau Corporation was enjoined from employing any person employed by IBM.

c. The Service Bureau Corporation was ordered to "maintain, in accordance with good accounting practice, separate and complete corporate records and accounts which shall be audited annually by independent public accountants."

d. Service Bureau Corporation was ordered to "charge for services rendered by it prices based upon rates which shall fairly reflect all expenses properly chargeable thereto provided, however, that nothing herein contained shall prevent the Service Bureau Corporation from reducing the price to meet an equally low price of a competitor."

The separation of IBM's service bureau business into a separate corporation within one year is evidence of the relative ease with which a separation of the telephone terminal equipment business of the Bell System operating companies can be effected. It would not take much research to show that the size of IBM's service bureau business and its degree of integration into IBM's other business is roughly comparable to the size and integration of the telephone terminal equipment business of most, if not all, of the individual Bell System operating companies. Thus, if IBM could separate out its service bureau business, the Bell System operating companies can separate out their telephone terminal equipment business.

The requirements that the separate corporations establish their own accounting records and procedures and charge for their telephone terminal equipment on the basis of rates which "fairly reflect all expenses properly chargeable thereto" is particularly necessary in order to force the operating companies to cease charging below-cost rates for their telephone terminal equip-

⁷ *U.S. vs. IBM Corporation*, Civ. No. 72-344, (S.D.N.Y., 1956) The consent order is set out at CCH Trade Regulation Reporter, 1956 Trade Cases, para. 68,245.

ment. Evidence that they presently do so is abundant and is described later in our statement.

Separation of the operating companies' telephone terminal equipment business into separate corporations with separate books of account audited by independent public accountants also is necessary to provide the basis for allowing visibility of the costs of the operating companies' terminal equipment business. It would allow proof of these costs to the same extent that proof of operating costs exists as to interconnect company competitors, and it would provide the basis of proving or disproving below-cost prices in any antitrust suits that might be brought involving the operating companies' terminal equipment business. At present, proof of the operating companies' costs of providing terminal equipment are difficult because of the scrambling of those costs with other costs and the inaccurate and undetailed accounting system used by the operating companies, as explained later in our statement.

In short, separating the terminal equipment business into separate corporations, is necessary to prevent the below-cost charging by the Bell System at the operating company level, just as the phase-out of manufacturing by Western Electric is necessary to prevent below-cost pricing at the Western Electric level. Our experience shows that the present system of state regulation is ineffective and unable to prevent the below-cost pricing of the Bell System and the consequent subsidizing of these below-cost rates by the general rate paying customers of the Bell System.

C. Deregulation of the terminal equipment business.

The deregulation of the telephone terminal equipment business would apply to the separate corporations established by the Bell System operating companies to conduct that business as well as to the telephone terminal equipment business conducted by all telephone utilities in the country. This deregulation is necessary in order to allow all suppliers of this equipment—utilities as well as interconnect companies—to compete on an equal basis. It is also necessary in order to eliminate the present time-consuming, ineffectiveness, and inability of the state regulatory commissions to redress predatory pricing and sales practices of the telephone companies with respect to telephone terminal equipment, as explained later in our statement. It is also necessary in order to eliminate the defense of state action immunity which the utilities interpose in court antitrust suits brought to redress predatory pricing and sales practices. The delay which this defense provides the utilities in such court suits is documented later in our statement.

D. Placing exclusive jurisdiction for protecting network from harm in the FCC.

Placing the responsibility for protecting the telephone network from harm within the exclusive jurisdiction of the FCC is necessary because a number of state public utility commissions have instituted proceedings looking toward the formulation of equipment standards and certification programs (e.g., California and Utah), and to the total banning of the interconnection of customer owned and maintained equipment based partly on the alleged spectre of harm such equipment might occasion to the telephone network (i.g., North Carolina, Nebraska, Oklahoma). A number of other state commissions have proceedings in progress involving design and pricing of certain interface devices required by the telephone companies (e.g., Minnesota and Michigan).

The present diversity of proceedings involving the question of protecting the network clearly cannot result in uniform standards or action. Obviously, equipment standards or certification programs, if these are deemed necessary in the public interest, must be standard throughout the country; otherwise, they obviously will impose a substantial burden on the interstate sale and leasing of telephone terminal equipment and will further prevent the development of a viable and effectively competitive telephone terminal equipment market. It can also be seen that continuing the present system of 50 state regulatory commissions having, or assuming, jurisdiction over the question of protecting the network plays into the hands of the Bell System in eliminating competition, for it makes it easy for the Bell System to establish varying and complex standards and requirements that would further suppress and confine the supplying of equipment to within individual state borders.

Moreover, the state commissions, almost without exception, are not staffed with technical or engineering experts capable of knowledgeably studying the question of harm. Placing exclusive jurisdiction within the FCC would allow a uniform approach to the issue and by a competent technical staff.

V. THE PRESENT SYSTEM OF STATE REGULATION IS INEFFECTIVE TO ADMINISTER THE PRINCIPLES OF COMPETITION, IS UNRESPONSIVE OR OPENLY HOSTILE TO INTERCONNECT COMPANY COMPETITION, AND IS SUBJECT TO ABUSE ON THE PART OF THE BELL SYSTEM

The need for the structural changes that we are convinced are necessary is seen from a close examination of the scheme of state telephone utility regulation, as shown by the experience of Litton BTS in appearing before state regulatory commissions and evidence revealed in the increasing public discussions of competition in the telephone terminal equipment market.

All rates charged by the telephone utilities, the equipment and service offerings, and terms of the offerings, for telephone terminal equipment presently must be filed with the various state regulatory bodies; and the rates, as filed, must, by law, be followed by the telephone utilities. Therefore, when questions arise as to the rates, practices, and offerings of the telephone companies, the first recourse is to the regulatory bodies for relief. For the following reasons, however, this approach is not effective to achieve redress from predatory pricing and marketing practices.

A. *Interconnect companies have difficulties obtaining notice of commission activities and telephone company rate filings and are often denied full opportunities to be heard before commissions*

The notice procedures under which regulatory agencies bring rate or service changes to the attention of the public are inadequate to apprise either the public or interconnect companies of telephone company changes in tariffs and service offerings. Incredible as it may seem, new equipment or service offerings, or additions of new features to existing equipment without increasing rates, or reductions in equipment rates, are uniformly filed by means of so-called advice letters. The new tariff sheets of the telephone company are attached to these letters. After 30 days—less in some states—the attached tariff sheets become effective unless the regulatory agency decides for some reason to suspend the rates. This virtually never occurs for several distinct reasons. The reason is that where rates are filed pursuant to the 30-day provisions, no public notice other than the filing is required. In order to effectively monitor the activities and rates of telephone companies, therefore, it is imperative that those wishing to compete go through the additional expense of appointing officers to constantly monitor the state and local regulatory authorities in order to simply obtain notice of what the telephone companies are proposing to do in the way of making new tariff or service offerings or adding features without changing rates, thereby, in effect, decreasing rates.

Interconnect companies are further often denied standing as a member of the public in their day-to-day dealings with state regulatory commissions. For example, Litton attorneys on several occasions visited the state commissions in Missouri, Kansas, and Oklahoma in order to determine the procedure governing their operations and the specific manner in which certain PBX tariffs became effective relative to an antitrust action pending against Southwestern Bell in federal court in Houston, Texas. In Missouri, the present General Counsel refused to permit the Director of Rates and Services for the Missouri Commission to issue an affidavit describing this process. In Kansas, the same type of denial issued—after the General Counsel for the Kansas State Corporation Commission had already executed an affidavit. In Oklahoma, the Chairman of the Oklahoma Commission, Charles Nesbitt, an outspoken critic of competition to the telephone companies, as shown later in our statement, refused to permit the Telephone Utilities Engineer of the Oklahoma Corporation Commission to even certify copies of actual tariff sheets on file with the Commission. He also prevented the Secretary of the Commission from certifying a copy of the Court Docket of the Commission, which is a matter of public record, or from stating in an affidavit that the Court Docket showed whether or not hearings were held relative to tariffs filed by telephone companies operating in Oklahoma.

These examples of inadequate notice procedures and of a closed-door policy toward interconnect companies represent a clear denial of access to the regulatory process and to public records—which access should be available to any member of the public. Regulation in this type of environment cannot begin to serve, much less even acknowledge, the full public interest, which includes the rights of competitors such as Litton BTS.

B. Automatic or virtually automatic rate changes and inadequate hearing procedures make commission regulation ineffective

Theoretically, under the 30-day advice letter tariff filing provisions—applying to rates for new equipment or service offerings, for increased service offerings involving no increase in rate, or for outright rate reductions—interested parties may informally approach the commission staffs and attempt to persuade them to recommend that the proposed tariff sheets be suspended and an investigation held into the proposed rates. This must be done prior to the 30-day period after which the rates automatically become effective. Practically, however, it is virtually impossible to persuade the regulatory commission staffs to recommend suspension and investigation. In one instance known to Litton in Kansas, the Kansas State Corporation Commission, meeting in conference “noted and filed” tariff sheets (making them effective) only 6 days after the Bell System affiliate Southwestern Bell had transmitted them to the Commission. Even when the proposed tariffs remain on file for the full 30 days, typically, they are never analyzed or reviewed and are simply placed into effect upon the expiration of the 30-day period.

Moreover, the statutes of some states provide for no suspension of the rates, and in all states any suspension and an investigation of the proposed rates is not a matter of right, but lies in the discretion of the commission (see, e.g., Missouri, V.A.M.S. §392.230; Arkansas; Ark. Stats. Annotated §73-117, 73-217; Kansas, KSA, §66-110, 66-111, 66-117).

In virtually all states, the staff is too unknowledgeable of telephone rate making to undertake to recommend that the telephone companies proposed rates be suspended and an investigation ordered. The staffs of some states have told us openly that they are unsympathetic to competition with the telephone company. Therefore, they would never recommend suspension of proposed rates.

In California, where Litton BTS initially had limited success in convincing the staff to recommend suspension of proposed advice letter rates, Pacific Telephone has recently begun proposing “provisional” rates in their advice letters. These rates would be effective for eighteen months, ostensibly while Pacific obtained cost experience on the equipment involved.

Litton BTS has protested several of these provisional advice letters, but with no success despite submitting to the staff extensive cost data developed from discovery and cross-examination of Pacific Telephone witnesses in other proceedings before the commission. This evidence showed that the proposed provisional rates are in the range of 25% to 30% below cost. In one case, Litton BTS protested a provisional rate for a PABX switch from Litton and other interconnect companies have installed and on which there is extensive cost experience. In all of Litton BTS’ protests, the commission staff has been so enamored of the “provisional” nature of the proposed rates that they have ignored all of the cost data on the theory that the rates are not final and can be changed later. However, as we pointed out, on the basis of the available evidence the provisional rates were so low that sizeable increases would be required later and that such increases would be unfair to Pacific Telephone’s customers. The staff has even failed to recommend that Pacific be required to account for the costs obtained during the provisional period in ways which would insure accurate cost accounting which Litton BTS has suggested to the staff.

Even where hearings are held on the telephone companies’ proposed rates, they are often not of a truly adversary nature. In Texas, for example, rate approval lies with the individual city councils throughout the state. Hearings held before these bodies proceed typically along the format of a series of brief formal statements without opportunity for cross examining, or even questioning, the basis of the telephone companies’ proposals. Litton BTS has had experience protesting rates before the City Council in Dallas, Texas.

Where hearings—or rate cases—are held, they often ignore issues which are pertinent to the interests of interconnect companies or the public.⁹ For example, in Missouri, where rates have been filed in two recent cases (Case Nos. 16,642 filed November 15, 1968, and 17,322, filed October 1, 1971), the former General Counsel to the Missouri Public Service Commission (from 1965 through 1972) stated in an affidavit which Litton filed in its antitrust suit against Southwestern Bell in Houston, Texas:

⁹ Litton, whenever it objects to a tariff, is arguing that the telephone company is selling at below the full costs of providing the equipment.

"I can state that in these cases, the Commission did not have before it information concerning competition between Southwestern Bell and other companies providing telephone equipment to telephone consumers, or information on the effect of Southwestern Bell's proposed tariffs on such competition, and did not request submission of such information. Indeed, to my knowledge, the Commission has never ruled that it is incumbent upon it to consider anticompetitive effects of the tariffs of regulated utilities as part of its general rate cases."

Also, in Michigan (Rate case No. U-4293 involving Michigan Bell Telephone Company), Litton BTS and other intervenors sought to place before the Commission the issue of the competitive effects of the tariffs. In a ruling never clarified or revised, the Hearing Examiner in that proceeding stated in the following dialogue at 552:

"Mr. CRAVER: By way of clarification, as I understand your Honor's ruling, the antitrust violations in the classical term are not a proper issue but as I understand it, we will be allowed to go into the effect of their rates and schedules on competition which would be different from charging an antitrust-violation, or a violation of the antitrust statutes."

"Examiner SHERIDAN: I will rule on that when the matter comes up."

"The anti-trust ruling, I do not feel that this is the proper forum. As to matters that you have raised, I am sure that all during the course of the hearings, we are going to be faced with the problem that you are a competitor of the Applicant."

"So I am not ruling that out, that you can't raise that question or that issue or anything at all."

"We will look at that as the subject matter is raised."

Intervenors were never certain throughout the rate case whether or not the competitive issue would be considered pertinent to the case. This had the handicap of placing intervenors in the position of having to proceed without knowing whether they had been granted, in effect, full rights to intervene and raise all issues pertinent to their competitive positions.

C. The competitive effects of telephone tariffs—an issue of central importance to the interconnect industry, and to the general public—is an issue which is ignored or not comprehended by state regulatory bodies

Another factor inhibiting the effectiveness of state agencies is the fact that—as we noted in our brief in the antitrust suit pending against Southwestern Bell at 81-83:

"[S]tate utility commissions have a history of refusing to consider anti-competitive issues. A number of state courts and state commissions have already decided that the competitive effects of utility rates on nonregulated competitors are not relevant nor within the jurisdiction of the Commissions. In *Cole v. Washington Utilities and Transportation Com'n*, 79 Wn. 2d 302, 485 P.2d 71 (Wash. 1971), the Supreme Court of Washington upheld the Washington utility commission's refusal to allow an association of fuel dealers to intervene in a rate case to show the adverse competitive effects of a gas utility's promotional practices. The court stated:

"The commission determined that, under existing law, a rate complainant entitled to be heard had to be a gas consumer and that the institute, therefore, had no standing to intervene. Secondly, the commission held that it had no jurisdiction to examine the economic effects of practices of a regulated public service utility upon nonregulated competitors . . .

"Secondly, it is clear that the institute's objections are beyond the concern of the commission under a reasonable interpretation of the term 'public interest.' At page 12 of the proposed order, the commission concluded that it had jurisdiction only to consider the effects of competitive practices of one regulated utility upon another regulated utility and no other business. Although the words 'public interest' are used extensively throughout the Public Service Laws, this interest of the public which is to be protected is that only of customers of the utilities which are regulated."

"... We conclude that the commission correctly determined that it had no authority to consider the effect of a regulated utility upon a nonregulated business. Our viewpoint is in accord with the weight of authority elsewhere. [Citations omitted] 485 P.2d at 73-74."

"In accord with this view are *Superior Propane v. South Jersey Gas Co.*, 60 PUR 3d 217 (N.J. Board of Public Utility Commissioners 1965) and *Re Promotional Activities by Gas and Electric Corporations*, 68 PUR 3d 162 (NY Public Service Commission, 1967).

"In fact, in this case, there is evidence that the state and municipal agencies would not hear and decide the issues 'in light of the antitrust laws.' See *Marnell, supra*, 360 F. Supp. at 414. The former General Counsel of the Missouri Public Service Commission stated that to his knowledge the Missouri Commission has never ruled that 'it is incumbent upon it to consider anticompetitive effects of its general tariffs of regulated utilities as part of its general rates cases.' (Plaintiff's Affidavit of Jeremiah D. Finnegan, Exhibit 12, Paragraph 12). Similarly, David L. Johnson, Rate Consultant for the Arkansas Public Service Commission, stated that the Staff of the Arkansas commission is under no requirement to make a determination of the competitive impact of tariffs filed by telephone companies. (Plaintiff's Affidavit of David L. Johnson, Exhibit 16, Paragraph 8)."

Finally, state commission staffs are very often not only unresponsive but also are incompetent to appraise the competitive aspects of telephone terminal equipment marketing. A typical example is the Michigan Public Service Commission where one staff member has a background in secondary school education, whereas a background of accounting or training in regulatory principles would obviously be more appropriate, and another staff member has as his background and training 25 years with the Michigan Bell Telephone Company. Thus, it is questionable if these individuals have proper training or a fresh and totally unbiased point of view.

In Texas where no state regulatory commission exists, and regulation is left to city councils, the regulators and staffs range from part time city council members, to part time city employees and, on rare occasions, a staff member who has responsibility for all utilities operating within the city. This type of regulation reduces the staff's ability and adequacy to handle all of the problems, particularly the newly evolved competitive problems, that are posed by the regulation of telephone terminal equipment market.

D. State regulatory commission proceedings are long, costly, and never ending, and do not accord any realistic prospects of relief

Litton has been involved in three major state commission proceedings, and a major antitrust suit in federal court against Southwestern Bell. In addition, Litton has filed two complaints before the California Public Utilities Commission against specific aspects of Pacific Telephone's pricing; it has filed a number of advice letter protests before the California PUC; and it has filed complaints before the North Carolina and Florida Public Commissions against PBX pricing by Southern Bell. The latter two complaints were withdrawn when Litton BTS withdrew from direct sales in North Carolina and Florida due to adverse competitive and regulatory climates.

The three major state commission proceedings include a proceeding before the California PUC involving PBX pricing by Pacific, a general rate case before the California PUC involving Pacific, and a general rate case before the Michigan Public Service Commission involving Michigan Bell.

In all of these complaints and proceedings, Litton has challenged the telephone company rates as being below cost and therefore unreasonable, unjust, and anticompetitive. Its experience from all of these proceedings is that state regulatory proceedings are protracted, expensive and, as a practical matter, never ending. Even in California, where the regulatory climate is relatively open and the commission is relatively progressive, Litton BTS has been faced with long delays and inconclusive proceedings. A brief review of Litton's major cases illustrates the basis for this conclusion.

The proceeding before the California PUC involving Pacific's PBX pricing stemmed from an advice letter filed by Pacific for the purpose of instituting the offering of a new PBX system manufactured by Western Electric called the 770A PBX. The advice letter was filed in September, 1972, and after several submittals of information to the commission staff by Litton BTS, the commission in November, 1972, ordered the proposed rates suspended and an investigation begun to determine whether the proposed rates were reasonable or lawful. In April, 1973, five days of hearings were held before a commission hearing examiner, during which Litton cross-examined several Pacific witnesses relating to the cost justification for the proposed rates. The cross-examination was directed at showing that the cost data was seriously understated in terms of the cost of the equipment required for 770A installations; costs of installation, maintenance and overhead; and costs of amortizing the 770A installations over their location and service lives. At the beginning of what would have been the

sixth day of hearings, Pacific's counsel requested that the hearings be suspended so that Pacific could undertake new cost studies. When Litton's counsel suggested that it would be preferable for Pacific to undertake new cost studies at the conclusion of the case when all of the defects in Pacific's cost justification would have been on the record, the examiner stated that under the commission's rules Pacific could withdraw its proposed tariffs at any time and start a new case over again and that it did not matter whether the present case was adjourned or not. Therefore, the hearings were adjourned. Litton was notified by Pacific just last month that Pacific has finally completed its additional cost studies and has prepared new proposed rates based on the new costs. As detailed later in this statement, the new rates are substantial increases over the rates originally proposed. However, Pacific has officially withdrawn its original advice letter and proposed rates and has informed us that it intends to file a new advice letter with the new rates. This means that although one and three-quarters years have already been spent investigating Pacific's 770A rates, a new proceeding is likely to ensue, and the process of judging the rates as to their reasonableness and lawfulness will begin all over again.

Hearings on the merits of Pacific's general rate case before the California PUC consumed approximately the first eleven months of 1973. Final briefs were filed in February, 1974, except for supplemental briefs on a limited issue which are due next month. Litton BTS cross-examined Pacific witnesses and presented direct evidence as to Pacific's key telephone and keyless business extension telephone rates only. Pacific announced during the hearings that it was re-evaluating the cost justification for its existing PBX rates and would be filing new PBX rates and a restructuring of the rates in the future. The Commission staff recommended a 15% increase in Pacific's existing PBX rates and the parties, including Pacific, did not oppose the staff's recommendation pending submission of Pacific's new PBX rates. To this day, Pacific has not filed its new PBX rates, but when it does, new hearings may have to be conducted to determine their reasonableness and lawfulness. On the basis of the evidence in the record, Litton BTS pointed out that Pacific's key and keyless business extension rates were below cost to the extent of costing the general taxpayers as much as \$100 million a year in subsidies to support the below cost rates. No decision has been rendered in the case as yet, but one is hoped for by this fall. However, while the issue of Pacific's present key telephone rates has been pending in this case, Pacific has instituted, through the advice letter procedure, new rates for a key telephone system, called the COMKEY 718, which would provide more features than existing Pacific key telephone equipment but at a 14% to 22% reduction from the rates Pacific proposed for its existing key telephone service in its general rate case. This means that after approximately a year and a half of litigation in the general rate case, even if relief is forthcoming from Pacific's existing below cost key rates, Pacific has placed in effect, through its advice letter procedure, new telephone service which is substantially below the rates litigated in the general rate case. This means that a new proceeding will have to be instituted regarding the COMKEY 718 rates which will start the litigation process all over again. Litton BTS vigorously protested Pacific's COMKEY 718 advice letter, but the protest was rejected.

The Michigan general rate case involving Michigan Bell was a relatively short proceeding in terms of the time between the beginning of hearings and the final decision. The elapsed time was only ten months. Litton BTS and other interconnect company intervenors extensively cross-examined Michigan Bell witnesses and presented direct testimony regarding the cost justification for Michigan Bell's proposed key and PBX rates. As described later, substantial evidence was introduced showing Michigan Bell's proposed rates did not recover costs in several major aspects. The commission granted no relief with respect to Michigan Bell's proposed rates even though the commission staff admitted that Michigan Bell's cost justification was "incomplete" and the commission itself admitted in its order that the cost justification was "faulted." The commission, however, did order Michigan Bell to substantially revise its cost accounting procedures for the future. Litton BTS and the other interconnect company intervenors appealed the commission's decision to the Ingham County Circuit Court. However, the appeal has not progressed past the discovery stage despite pleas from Litton BTS for expedition based upon state expediting statutes. Michigan Bell has now filed an application for a new general rate increase of approxi-

mately four times the amount sought in the application now on appeal, and the same issues that are on appeal from the last rate case are now involved in the new rate case.

The manner in which the state regulatory process can cause delays in anti-trust suits against the Bell System are illustrated by experience in Litton's antitrust suit in federal district court against Southwestern Bell. The suit attacks below-cost pricing and typing of Southwestern Bell's PBX equipment to its telephone exchange service. The complaint was filed in April, 1973; Southwestern Bell promptly filed a Motion to Dismiss on the ground that the issues were within the exclusive jurisdiction of the state regulatory agencies; Litton's answering brief was filed December, 1973; and we are still awaiting setting of a date by the court for argument. It is fair to say that this illustrates the Bell System's ability to use the state regulatory process to substantially delay court actions against it.

All of this litigation has occupied a three-man legal group at Litton for approximately 90% or more of its time during almost a year and three-quarters. Out-of-pocket expenses caused by travel, consulting fees, local counsel where required, printing costs, and telephone calls in the four major cases alone have amounted to \$101,243.49. The out-of-pocket expenses by themselves would have been impossible for a small independent competitor to afford. Added to the out-of-pocket expenses, the cost for outside local counsel for the time that Litton's in-house counsel have spent on these cases would have been totally beyond the limits of an independent company trying to get established in this market.

In short, Litton BTS' experience before the state regulatory commissions shows how the state regulatory system plays into the hands of the Bell System in its attempt to eliminate competition. A never ending cycle of new filings obsolesces old rates so that even if relief is obtained against the old rates, a whole new proceeding is necessary on the new rates. This makes constant litigation a way of life for a company trying to get established and to grow in the telephone terminal equipment market. The burden of litigation expense would consume such an inordinate portion of a company's revenue that a typical independent company would not have enough left to expand the business beyond a limited range of equipment within primarily a local area. This is an important reason underlying the conclusion that deregulation of the telephone terminal equipment business is an important part of the structural changes that must be made if the market is to develop into a viable, effectively competitive market.

E. A regulatory bias exists in favor of the Bell System and in opposition to interconnect companies

Many state regulatory commissioners in the United States seems to be predisposed to favor the Bell System and to disfavor the interconnect industry. As a result, these state regulatory commissioners would go, and do go, into hearings involving disputes between the telephone companies and interconnect company competitors lacking the open mind and objective viewpoint that we have always believed to be the foundation of due process of law and a fair hearing in judicial and quasi-judicial proceedings.

One reason for regulatory bias is undoubtedly the long-term relationships which Bell System officials have had with commission staffs and commissioners. This in turn undoubtedly has its roots in the fact that for many decades the Bell System has been unchallenged in its respective service areas. This long-term relationship inclines the regulators to see things in the way that the Bell System officials see them. Hence, many regulators have very narrow viewpoints of what is appropriate telephone terminal equipment policy. This, on its face, raises serious questions bearing upon the disinterested, nonprejudiced nature of the regulators.

Some of the leading regulators have shown shocking rejudgment against competition with the telephone companies. Mr. Ben T. Wiggins, chairman of the Georgia Public Service Commission and President of the National Association of Regulatory Utility Commissioners (NARUC), has publicly announced his opposition to interconnection. In so doing, he not only declares his bias (which is obviously repugnant to any good faith attempt to regulate in the public interest), but he also displays a lack of understanding of historical and current benefits of competition. For example, in his speech before the delegates to the

United States Independent Telephone Association ("USITA") Convention held October 22-24, 1973, in Miami Beach, Florida, Mr. Wiggins said that:

"Competition, in any true sense, simply isn't possible.

"Now, if the future was only dimly foreseeable three years ago when I discussed 'competition and the public interest,' it certainly looks a lot clearer in the light of the experience of John deButts [chairman of AT&T] cites.

"The 'cream' is being skimmed; revenues which contribute to maintenance of low basic service rates are being lost to unregulated carriers without public service responsibility. The evidence is beginning to pile up, and my own early wait-and-see attitude is no longer required by any duty to be patient."⁸

Showing his own predisposition, Mr. Wiggins went on to applaud the movement of the North Carolina Commission to ban interconnection.⁹ Strangely, Mr. Wiggins, though a state commissioner and an official who must act in a quasi-judicial capacity in judgment over the public interest, is far more biased against competition than was Mr. H. I. Romnes when he was chairman of AT&T. Mr. Romnes said at the Pioneer General Assembly, New York Hilton Hotel, September 21, 1971, that "competition ought to be the rule whenever and wherever it would benefit the public."¹⁰

Fortunately, not all telephone company officials share Mr. Wiggins' opposition to competition. Mr. Paul H. Henson, Chairman of United Telecommunications, an independent telephone company, said at the same USITA Convention:

"I agree that competition in providing telephone terminal equipment must be free competition with the same rules applying to all competitors. Given these conditions, I am confident that all telephone companies can give a good account of themselves. But supposing my company competes to the best of its ability, and my customer, for reasons of his own, still obtains his PBX switchboard from an interconnect vendor. What am I going to do about it? Squabble with my customer? Make him angry with me? Be uncooperative to the extent that his service is impaired? No, I'm not going to do any of these things. I'm going to bend a little, because I'm in business to make a profit. He's still my telephone customer! I need his goodwill in order to coexist and to service his other communications requirements that are profitable to me."¹¹

Mr. Henson also interpreted the public interest differently from Mr. Wiggins. He said:

"With the public interest as our criterion, let us decide which of the old ways of doing business still are valid for this day and age and which ones should be modified to meet the public needs of today and tomorrow. Instead of adopting an inflexible attitude about competition of any kind, let's look for ways to accommodate competition in the public interest."¹²

Another commissioner who has expressed a prejudgment against interconnection is Charles Nesbitt, Chairman of the Oklahoma Corporation Commission. Mr. Nesbitt contributed to a panel discussion at the summer meeting of the Organization for the Protection and Advancement of Small Telephone Companies ("OPASTCO"). During the meeting, Mr. Nesbitt expressed his philosophy regarding competition as follows:

"[M]ore utter nonsense has been promulgated, and is being promulgated in the name of competition/antitrust these days than in the name of any other philosophy and more actual disruption of our economy is being carried out in the name of this high-sounding word, competition."¹³

It is not clear from Mr. Nesbitt's remarks whether he favored monopolies for all major industries or just a continuation of the monopoly in the telephone industry. In any event, from his adamant view that competition is a "disruption of our economy" one could easily surmise the kind of response an interconnect company would receive from him in a proceeding before the Oklahoma Corporation Commission involving anticompetitive telephone company pricing. The fact that the Oklahoma Commission attempted to ban the interconnection of customer provided and maintained equipment with the telephone network in Okla-

⁸ Wiggins, "A Regulator Looks at Competition," *Telephony* magazine, November 12, 1973, at p. 46.

⁹ *Id.* at 44, 46, 48.

¹⁰ Statement of William G. McGowan, submitted to the Subcommittee on Antitrust and Monopoly, July 30, 1973, at 73.

¹¹ Henson, "Better Bend Than Break," *Telephony*, November 12, 1973 at 28.

¹² *Id.* at 32.

¹³ "OPASTCO's role as David facing industry's giant problems shows clear in lively meeting," *Telephony Magazine*, August 13, 1973, at 43.

homa would indicate that Mr. Nesbitt is not alone among the Oklahoma commissioners in his opposition to interconnection.¹⁴

VI. THE INEFFECTIVENESS OF THE STATE REGULATORY SYSTEM ALLOWS THE BELL SYSTEM TO ENGAGE IN BELOW-COST PRICING AND INCREASING RATES WHERE IT FACES LITTLE OR NO COMPETITION AND LOWERING RATES WHERE IT FACES SUBSTANTIAL COMPETITION AND OTHER PREDATORY PRACTICES

The abuses which Litton BTS has been litigating over the past one and one-half years, include the following types of problems:

1. Pricing telephone terminal equipment service below cost.
2. Shifting revenue from business telephone service to the general ratepayers by seeking to place a disproportionately large burden of allegedly required rate increases on telephone line charges or related services such as coin phones and information service—which are mostly borne by residential customers—and a disproportionately lesser part on business equipment.
3. Eliminating charges for telephone terminal equipment and accounting for the lost revenue through higher rates on telephone line charges or related services.
4. Offering combination, or package, rates which have the effect of tying the telephone company's equipment to its telephone exchange service.
5. Assessing charges for allegedly protective interface devices for use with customer provided telephone terminal equipment without any showing that such equipment has caused harm, has any more potential for causing harm than the telephone company's own terminal equipment, or has any real potential for causing harm at all.

These are firmly embedded anticompetitive practices when carried out by firms with monopoly power. For example, it is a well-established principle of anticompetitive behavior, having particular relevance to this case, that one who has monopoly power, even though lawfully acquired, cannot legally employ that power to expand his monopoly. This includes the principle that one cannot use his monopoly power in one market to exclude competition in another. *United States v. Griffith et al.*, 334 U.S. 100, 107-109 (1948); *United States v. Lowe's Inc.*, 371 U.S. 38, 39-50 (1962); *Fortner Enterprises, Inc. v. United States Steel Corp.*, 394 U.S. 495, 498-506 (1969); *Advance Business Systems & Supply Co. v. SCM Corp.*, 415 F.2d 55, 60-69 (4th Cir. 1969) *cert. denied*, 397 U.S. 920; *TV Signal Co. of Aberdeen v. A.T.&T.*, 462 F.2d 1256, 1260-1261 (8th Cir. 1972).

Also, discriminatory pricing in the sense that prices are lowered where competition is significant and maintained or raised where there is little or no competition has been found to be an illegal use of monopoly power. *United States v. Grinnell Corp.*, 384 U.S. 563 (1966); *United States v. United Shoe Machinery Corp.*, 110 F. Supp. 295 (D.C. Mass. 1953) *aff'd per curiam*, 347 U.S. 521 (1954); and the very recent case of *Telex Corp. v. IBM*, Trade Reg. Rep., Report No. 91, Part II (September 24, 1973), *appeal docketed*, No. 73-1874-1878, (10th Cir.).

It is also settled that pricing below cost is an illegal anticompetitive tactic when used to acquire or maintain monopoly power. See, e.g., *Ovitron Corp. v. General Motors Corp.*, 295 F. Supp. 373 (S.D. N.Y. 1969).

A. Below cost pricing

Based on the substantial litigation in which we have been engaged, we believe the evidence is substantial that the Bell System operating companies have been engaged in forcing other customers to subsidize below-cost rates on business terminal equipment,¹⁵ and that the state regulatory agencies are just not effective in requiring the operating companies to formulate rates for competitive terminal equipment which recover full costs. A particularly dramatic example of this is shown by the facts that have been developed from our efforts in challenging Pacific Bell's proposed rates for its 770A PBX service.

¹⁴ *Telephony Magazine*, February 18, 1974, at p. 16. The FCC held this ban "poses a clear conflict with the Communications Act" and "we see no reason why there should be any absolute ban against interconnection of customer-leased equipment maintenance or serviced by the lessor. . . . Accordingly, in this area also the Oklahoma rule squarely conflicts with the Federal ruling." *Telecent Leasing Corp., et al.*, FCC Docket No. 19S08, FCC 74-109 (39 Fed. Reg. 4942, February 8, 1974).

¹⁵ We note that the study for the Office of Telecommunications Policy by Dittmer Associates, Inc. shows that the Bell System also has been forcing residential customers to subsidize the Bell System's move and changes costs for business terminal equipment to the amount of \$1.313 billion in 1971. See *Electronic News*, June 3, 1974, at p. 14.

As already noted, Litton BTS was successful in having Pacific's original advice letter proposing rates for the 770A in September, 1972, suspended by the California PUC and an investigation of the proposed rates instituted. After five days of hearings before a hearing examiner, Pacific requested the termination of the hearings while it undertook new and detailed cost studies for its 770A offering. Last month Pacific informed us of the new cost studies and of new rates which Pacific believes would be justified by the new cost studies. The new rates would be substantially higher than the rates originally proposed in its 1972 Advice Letter. This is a clear indication that after extensive cost studies of the 770A PBX service, Pacific has concluded that its initially proposed rates would be too low to recover the costs of providing the service.

A comparison of the rates proposed initially by Pacific with the currently proposed rates based upon the detailed cost studies performed following the hearings is shown in the following table.

COMPARISON OF PACIFIC TELEPHONE'S INITIAL 770A RATES WITH INDICATED RATES FOLLOWING NEW DETAILED COST STUDY (FOR TYPICAL SYSTEM SIZES)¹

	P.T. & T. initially filed rates Cal. advice letter 10892 September 1972			P.T. & T. new rates based on new cost study following hearings May 1974		
	Basic termination charge	Installation charge	Monthly rate	Basic termination charge	Installation charge	Monthly rate
6 trunks—35 stations.....	\$1,800	\$2,212	\$324.10	\$3,150	\$3,342	\$394.50
7 trunks—60 stations.....	2,300	2,739	405.70	4,100	4,324	544.75
15 trunks—80 stations.....	2,300	2,955	422.50	4,100	4,520	572.50
25 trunks—160 stations.....	3,300	4,615	688.00	6,900	7,640	991.00
35 trunks—240 stations.....	4,300	5,885	888.00	8,800	9,860	1,333.50
44 trunks—360 stations.....	5,800	7,628	1,160.40	12,600	13,840	1,790.10

¹ Each System comparably equipped to provide such features as direct station selection, camp-on, attendant-controlled conference, indication of camp-on, call transfer by stations, consultation hold, add-on conference, and truck answer any station. All rates include common equipment, console, features, and trunk termination charges.

A few examples from the table show the substantial increase in indicated rates following the detailed cost study. For a 770A installation of 7 trunks and 60 stations, the new indicated rate would be an installation charge of \$4,324 and a monthly rate of \$544.75 as compared with an installation charge of \$2,739 and a monthly rate of \$405.70 originally proposed. The increase in rate indicated by the new cost study is greater as the size of the system increases. The ultimate conclusion we draw from these facts is simply that if Pacific had not been challenged to prove that its proposed rates for the 770A recovered the full costs of providing the service, they would have become effective with the certain result that other ratepayers would have been required to subsidize part of Pacific's cost of providing the service.

The experience in California with forcing Pacific Telephone to examine carefully and to prove its costs¹⁶ indicates the extent to which other operating companies of the Bell System are apparently charging below cost for the same PBX and requiring the general rate paying public to subsidize the losses. Southern Bell is a classic comparison. In fact, Southern Bell's rates for the 770A are so low in comparison with the new indicated rates for Pacific, that the losses Southern Bell is incurring on this service have to be astronomical. The table on the following page compares Southern Bell's rates with Pacific's new, indicated rates. The comparison shows that for each station size, Southern Bell's rates are far below any reduction that could be justified by differences between Southern Bell's labor and overhead costs and Pacific's comparable costs.¹⁷ For example, Pacific's new rate for a 7-trunk, 60-station configuration would be \$4,324 for installation and \$544.75 per month. Southern Bell's installation charge is only \$200 for the same system and the monthly charge is only \$327.60. The difference becomes more dramatic as the installation size increases.

¹⁶ Since the new indicated rates have not been the subject of hearings, our discussion of them here does not constitute our agreement with them in all respects, as further defects in Pacific's cost studies may exist. This discussion assumes the adequacy of the cost studies and the correctness of the rates as disclosed to us by Pacific.

¹⁷ The cost of the equipment is obviously the same since both operating companies buy from Western Electric.

Thus, for a 44-trunk, 360-station system, Pacific's installation charge is \$12,890 and the monthly rate is \$1,790.10; Southern Bell's is only \$900 for installation and \$1,012.20 per month.¹⁵ With rates such as these, it seems to us that the conclusion is inescapable that Southern Bell intends to obtain 100% of the PBX market in its area at any cost. This means, of course, at higher cost for residential customers. The effect is substantial, for the rates shown here are in effect without substantial deviation throughout Southern Bell's operating areas which includes the Southern Atlantic seaboard states from North Carolina to Florida.

COMPARISON OF RATES FOR 770A PBX SERVICE BETWEEN PACIFIC TELEPHONE AND TELEGRAPH CO. AND SOUTHERN BELL TELEPHONE AND TELEGRAPH CO. (FOR TYPICAL SYSTEM SIZES)¹

	P. T. & T. new rates based on new cost study following hearings May 1974			Southern Bell rates effective spring 1973		
	Basic termination charge	Installation charge	Monthly rate	Basic termination charge	Installation charge	Monthly rate
6 trunks—35 stations.....	\$3, 150	\$3, 342	\$394. 50	\$2, 855	\$100	\$267. 35
7 trunks—60 stations.....	4, 100	4, 324	544. 75	3, 400	200	327. 60
15 trunks—80 stations.....	4, 100	4, 520	572. 50	3, 285	200	385. 50
25 trunks—160 stations.....	6, 900	7, 640	991. 00	4, 315	400	610. 25
35 trunks—240 stations.....	8, 800	9, 860	1, 333. 50	5, 115	600	789. 55
44 trunks—360 stations.....	12, 600	13, 840	1, 790. 10	6, 315	900	1, 012. 20

¹ Each system comparably equipped to provide such features as direct station selection, camp-on, attendant-controlled conference, indication of camp-on, call transfer by stations, consultation hold, add-on conference, and trunk answer any station. All rates include common equipment, console features, and trunk termination charges.

It is interesting to note that Southern Bell's service area includes the state of Georgia wherein Mr. Ben Wiggins is chairman of the Public Service Commission which has the responsibility of regulating Southern Bell's rates in the public interest. We are compelled to conclude that while Mr. Wiggins is on the speech-making circuit echoing AT&T's philosophy against competition, Southern Bell is eliminating competition in Georgia and forcing the general rate paying public to pay most of the cost of eliminating it.

B. Lowering rates where competition exists and raising them where competition is weak or nonexistent

Other examples of Bell System anticompetitive rate strategies were present in the rate cases filed in California and Michigan last year. In Pacific Telephone's California general rate cases, Pacific requested increases in its operating revenues of approximately \$289,000,000. The large percentage of this increase fell upon exchange services as to which Pacific has a monopoly in its service area. The requested increase for exchange services amounted to up to 48%. By contrast, where Pacific faces competition, namely in the provision of PBX and key telephone system services, Pacific proposed only a nominal 4% to 8% increase in rates. Yet, cost increases and inflation have affected all sectors of Pacific's operations which makes it difficult to justify, on a cost basis, disproportionate increases as between its monopoly and competitive services. In addition, as noted, BTS showed in its briefs in the case that the evidence in the record indicated that Pacific had understated its costs—particularly the labor associated with the installation, maintenance, repair and removal—of key and keyless business telephone service by as much as \$100,000,000 a year.

Another example of the general ratepayer subsidizing the business equipment customer developed in the Michigan Bell general rate case. There Michigan Bell sought a revenue increase of approximately \$29.7 million. Although one-half of Michigan Bell's total intrastate revenues are derived from business services, only 11% of the requested increase in revenues was derived from business services and 89% was derived from exchange service which applies to residential as well as business customers.

¹⁵ Comparing the tables on pages 51 and 54 also shows that Southern Bell's 770A rates are substantially lower than the rates initially proposed by Pacific Telephone which it was not able to substantiate in the hearing before the California PUC.

In addition to the disproportionate burden of the increase, there were several dramatic examples of undercosting. For example, in determining the costs, or revenue requirements, for PBX systems of up to 400 extensions, Michigan Bell lumped together the higher cost old equipment and lower cost new equipment but in a proportion of 90% new equipment and only 10% old equipment. This obviously resulted in a considerably lower combined cost for all of the equipment. However, the new equipment had been in use for only slightly over a year, so it could not possibly have constituted 90% of all the equipment installed. Thus, Michigan Bell's rates were arbitrarily based upon an equipment mix which understated costs with the attendant effect that the general rate-payers must make up the difference.

Another example of disproportionate rate fluctuations by Michigan Bell with the effect of excluding interconnect competition from particular sectors of the terminal equipment market occurred in key telephone systems. The rates were reduced by as much as 53% in the segment of the market which applied to key telephone systems in line configurations of approximately 10 to 20 lines, which the evidence showed is the most competitive segment of the market. Where Bell is insulated from competition in the lower line sizes (e.g., Systems with 1 to 10 lines) through the charges for interface devices, the rates for key telephone services were increased as much as 155%.

C. Engaging in tying practices

A classic example of using the telephone companies monopoly over the furnishing of telephone exchange service within their respective service areas to eliminate competition from independent suppliers of telephone terminal equipment is found in the tariffs of Southwestern Bell in the States of Missouri, Kansas, Oklahoma, Arkansas, and Texas. Litton has instituted an antitrust suit against this practice in Federal District Court in Houston, Texas. The practice employed by Southwestern Bell is to offer its trunk line service and PBX equipment together, as a package, at a single or package rate, which is more favorable than the rates for the trunk line service and PBX equipment when offered separately. The more favorable package rate effectively forces the customers of Southwestern Bell's trunk service to also use Southwestern Bell's PBX equipment. The net effect of this type of practice is to preclude interconnect companies from competing in the bulk of the PBX terminal equipment marketplace in the five states served by Southwestern Bell.

D. Requiring interface devices at inflated prices without justification

Another practice employed by the telephone companies to eliminate competition in the supplying of telephone terminal equipment is the requirement, with the approval of the state regulatory agencies, of interface devices between the telephone companies' lines and customer-provided equipment. In its *Carterfone* decision, the FCC held that:

"We are not holding that telephone companies may not prevent the use of [customer-provided] devices which *actually cause harm* . . . [13 F.C.C. 2d at 424]."

However, ever since *Carterfone*, the telephone companies have required interface devices—designed, approved, provided, and installed only by themselves—with each piece of customer-provided terminal equipment *whether or not* that equipment causes actual harm and *without any showing* that the customer's equipment causes actual harm. In fact, the evidence shows that the telephone terminal equipment supplied by customers of the telephone companies does not cause harm if directly connected to the telephone network. For example, in an investigation now in progress before the California PUC (Case No. 9625), the Commission's staff witness, Mr. Vladislav Bevc, a licensed professional engineer and head of the Tariff Unit in the Communications Branch of the Commission's Utilities Division, states in his prepared testimony:

"Although the staff has sought evidence neither Pacific nor any other utility has to this date provided any information to substantiate such claim [that interconnection in any form tends to degrade the quality of service], nor has such information been provided in any of the interconnection cases before this Commission."¹⁹

¹⁹ Prepared testimony of Vladislav Bevc, P.E., on Proposed General Order covering Standards for Connection of Customer-Provided Equipment to the Public Utilities Telephone Network, California Public Utilities Commission, Case No. 9625, at p. 3.

Nevertheless the telephone companies, with the tacit approval of the state regulatory commissions, still require the interface devices and at inflated prices that clearly eliminate competition. For example, in California, Pacific Telephone currently provides any size of key telephone instrument, from the 10-button Call Director to the 30-button Call Director, for an installation charge of \$50 and a monthly charge of \$4.65. Yet the charge for each interface device alone—which is required when the customer uses his own key telephone instrument purchased or leased from a competitor of Pacific—ranges from \$4.25 to \$5.50 per month and installation charges of \$32.50 to \$35.00 per line. This shows that to meet Pacific's rate of \$4.65 per month for the key telephone, a competitor must virtually give his equipment free to the customer because the customer will have to pay the interface charge of \$4.25 to \$5.50 per line.

The inflated prices for the interface devices are created by designing them to be overly complicated and redundant. As Mr. Bevc states in his prepared testimony in the California PUC investigation:

"The Minnesota Public Service Commission in *Patterson vs. Northwestern Bell*, Docket 5391, April 1974, found for example, that network protection arrangements RDMZR, RDL and STCOX also offered in California are inadequate, overengineered for the purpose of eliminating alleged harms, and consequently over-priced. Over-engineered means that in this case as many as two-thirds of components in these network protective arrangements are unnecessary."²⁰

The evidence shows that the interface devices themselves cause substantial harm to the telephone network. As Mr. Bevc testifies, very often the problems associated with interconnected equipment are the direct result of the protective arrangement. He cites problems which result from a protective arrangement which is not completely compatible with customer-provided equipment as encompassing:

"anything from degradation of service such as distortion and attenuation of voice communication to complete failure amounting to a de facto disconnection in cases when calling parties cannot reach a customer served through a network protecting arrangement."²¹

Moreover, the interface devices offer only minimal protection against possible harm to the network. As Mr. Bevc testifies:

"The function of these network protective arrangements is rather dubious. There are quite a few articles on these devices in the technical literature. The number of different types is proliferating. The staff has requested the utilities to provide detailed descriptions of the functions of network protective arrangements in case of all new tariff proposals since March 1974. From the responses it is evident that the network protective arrangements are not designed to protect against all potential harms the utilities say they must prevent, namely, hazardous voltages, excessive signal and noise levels, line imbalance, and faulty network signalling. It appears that these devices do not protect against excessive signal and noise power, faulty signalling, and transient voltage."²²

Testimony submitted by interested parties in the California interface investigation substantiates the testimony of Mr. Bevc of the PUC staff and shows further that the potential for harm from the customer-provided equipment supplied by competitors to the telephone is no greater than the potential for harm that exists with the telephone companies' own terminal equipment. The reason for this is that the competitive equipment is largely manufactured under license from Western Electric and is manufactured by companies that sell the same kind of equipment to independent telephone companies who directly connect it to the telephone network without causing harm.

Thus, the net effect of the interface devices is to impose an unfair, discriminatory requirement and charge upon customer-provided equipment sold by Litton BTS and other competitors of the telephone companies. The only real protection the devices afford is to protect the telephone companies from this competition.

E. Applying reciprocity pressure

In addition to the anticompetitive pricing and marketing practices utilized by Bell System operating companies set forth above, these same companies have

²⁰ *Id.* at p. 6.

²¹ *Id.* at p. 5.

²² *Id.* at p. 4.

also applied reciprocity pressure on customers considering switching over to their own terminal equipment or who have been likely candidates to purchase or lease their own equipment. Typically, the customer has been advised that his decision to change out to his own equipment would have an adverse impact on (1) his telephone service or on (2) any business dealings he may have with the telephone company.

In some instances, installation personnel of the telephone company have advised the customer that he will have service and operational problems if he buys or leases his equipment from a competitor of the telephone company. On occasion, telephone company personnel have also been discourteous and inefficient in accommodating the actual switchboard from the telephone company's equipment to the customer's equipment. The most obstructive, and anti-competitive, telephone company practice has been the threat of economic reprisal. This may occur where the telephone company has been buying products or services from the telephone customer. Economic reprisal would take the form of the telephone company's threatening to stop buying from the customer if he switches to his own equipment, or the actual cessation of purchases from the customer after he switched to his own equipment. Documents illustrating these forms of pressure on customers or potential customers of Litton BTS are attached as Exhibits A-G.

Applying reciprocity pressure of these types is a recognized anticompetitive practice. See *U.S. v. General Dynamics Corp.*, 258 F.Supp. 36 (S.D.N.Y., 1966); *U.S. v. U.S. Steel Corp.*, 1969 Trade Cases, Para. 72,826 (D.C.Pa.). It was described by The Supreme Court in *FTC v. Consolidated Foods*, 380 U.S. 592 (1965), as "an irrelevant and alien factor" intruding into the choice among competing products, creating at the least "a priority on the business at equal prices." (*Id.* at 594)

Further, the Court said:

"Reciprocal trading may ensue not from bludgeoning or coercion but from more subtle arrangements. A threatened withdrawal of orders if products of an affiliate cease being bought, as well as a conditioning of future purchases on the receipt of orders for products of that affiliate, is an anticompetitive practice." [*Ibid.*]

Hence, when this practice has been used to the detriment of interconnect company competition, it is the basis for obtaining injunctive and damage relief under the antitrust laws. The pervasiveness of the practice, however, and obvious problems of obtaining definitive proof of the reasons why a potential customer decides to remain with the Bell System, make enforcement in the courts a difficult and expensive proposition. Therefore, to the extent that the Bell terminal equipment operations are separated from other business relationships with their customers, the likelihood that these practices will continue is substantially reduced. This is further support for our recommendation that the telephone terminal equipment business of the Bell System operating companies be placed in separate corporations with separate officers, personnel, and books of account.

VII. THE ELIMINATION OF COMPETITION BY BELL SYSTEM OPERATING COMPANIES IS FACILITATED BY COST ALLOCATIONS AND BELOW COST PRICING AT THE WESTERN ELECTRIC LEVEL

This Commission has before it in the testimony of Dr. Williams H. Melody,²⁸ the proposition that exchange transactions between Western Electric and the operating companies as they pertain to equipment purchases from Western Electric are not subject to market conditions and are not regulated. Hence, a presumption arises that where the operating companies need a lower price on terminal equipment purchased from Western Electric in order to defeat competition in the terminal equipment market, subsidization can exist at Western Electric in order to allow the lower price.

Evidence adduced in the litigated cases supports this conclusion. Under the Western Electric accounting system, Western Electric costs can be shifted from products which are particularly prone to competition to other equipment which is used to provide monopoly service and, thus, is immune to competition. In at least two cases, in Michigan and in California, Litton BTS has extensively

²⁸ Statement of Dr. William H. Melody before the Committee on the Judiciary, Subcommittee on Antitrust and Monopoly on S. 1167, August 1, 1973 at p. 16.

cross-examined Bell System with on how costs are determined and applied to products at the Western Electric level. It is apparent, based on this experience, that the entire approach to assigning costs at Western Electric is geared to accumulating cost figures for broad product lines. There are typically hundreds of individual products in each product line, and these include competitive terminal equipment, which is used for business customers only, together with equipment that is used to provide monopoly services to residential and business customers. For example, PBX equipment is included in a product line with large central office equipment. Thus, Western Electric does not account for its actual costs of manufacturing by the individual products which incur those costs.

Costs are assigned to individual products within the principal product lines by averaging the actual costs incurred in providing the hundreds of products in a product line, and applying the average factor equally to all products in the line. Western Electric prices, however, are not set even according to this averaging of actual costs across broad product lines, but are set prospectively on the basis of anticipated or estimated standard costs of labor, material and overhead. Thus, there is room for considerable pricing discretion by Western Electric. First, rates are set according to estimated costs established in advance of production. Second, even where rates are measured against actual costs, the aggregation and averaging of actual costs across broad product lines blurs the cost of each specific product.

This same effect also exists with respect to the manner in which Western Electric accounts for research and development expense in arriving at price. Bell Laboratories performs research and development for Western Electric which is directed to the development of a specific product. The expenses incurred by Bell Laboratories in performing this product development are charged to Western Electric. In accounting for these expenses, however, Western Electric does not charge them to specific products. Instead, they are charged to the broad product lines. Even where there are specific product start-up research and production costs, those costs are not applied directly to the specific product but rather are spread across all products in the product lines.

Western Electric even obscures its rate of return by computing it on the basis of the broad product lines. This does not show whether the price of each product in the product line is returning that product's full costs. Thus, Western Electric can easily lower the prices of its competitive equipment in a product line to meet competition and raise the prices of other products in the line to maintain the same rate of return for the entire line. Similarly, Western Electric can also change prices for individual products to lower rates of return or sell below actual costs to meet competition and raise prices on other products within the same product line while maintaining the same aggregate rate of return on the overall product line.

Bell System witnesses have admitted that there is communication between the Bell operating companies and Western Electric as to the pricing of Western Electric products which the operating companies use in providing competitive telephone services. The operating companies communicate to Western Electric such information as to whether Western Electric's price for competitive equipment is too high in relation to equipment offered by competitors.

In summary, the considerable cost averaging processes used within Western Electric and the wide latitude for setting prices for some products at actual below-cost levels and making up the loss from other products gives the Bell System overwhelming power to justify charging any price necessary to eliminate competition. Because of the complexity and unorthodoxy of the accounting system, it is virtually impossible for any regulatory agency to insure that pricing is fully cost recoverable at all times. Therefore, divorcement of the Western Electric operations from the Bell System is necessary in order to escape from this milieu of discretionary pricing power at the Western Electric level.

VIII. FREE AND OPEN COMPETITION IN THE TELEPHONE TERMINAL EQUIPMENT MARKET IS CLEARLY IN THE PUBLIC INTEREST

There has been increasing agitation to turn the clock back and ban the interconnection of customer-provided equipment altogether, and to expand state regulation to include the sale, lease, or using of customer-provided equipment.

Neither of these proposals would be in the public interest. Banning interconnect equipment would be singularly inappropriate since there is no evidence of harm from such equipment, and protection against the possibility of harm is easy and inexpensive to accomplish whether the equipment is sold by interconnect companies such as Litton BTS or by telephone companies.

The extension of regulation to the new interconnect companies would also be inappropriate for the reasons that where competition can function, it is preferred to regulation and that where monopoly exists it should be narrowly defined and limited in its parameters.²¹ Thus, the arguably proper monopoly position of the telephone company in some of its transmission services should not be extended into markets where competition can serve to (1) properly allocate resources and (2) control, within the confines of supply and demand, the price and supply of particular commodities.

The case for competition has clearly been made; competition has not only been judged beneficial by both economic theory and the realities of economic history, but it stands as a central principle of the American economic system. The hallmarks of competition are the promotion of variety, innovation, production efficiency, prices consistent with costs, the allocation of resources to the most efficient producers, and the opportunity for entrepreneurial activity. Competition has been more responsive to changing consumer wants and needs, and it has countered the tendency to monopolies to become stodgy, self-serving bureaucracies.

The terminal equipment market's brief competitive existence has already produced significant equipment innovations (the Litton BTS contributions alone are significant), better service which is the imperative of interconnect company survival, and greater overall utilization of the telephone system. The Federal Communication Commission noted *In the Matter of Carterfone*, 13 F.C.C. 2d 420 (1968) that:

"[O]ur conclusion here is that a customer desiring to use an interconnecting device to improve the utility to him of both the telephone system and a private radio system should be able to do so, . . ." [*Id.* at 424].

The salutary effects of the competition established in *Carterfone* have been reaffirmed by the FCC in reflecting upon the impact of its decision in *Carterfone*. The Commission has stated:

"We believe that the soundness of our *Carterfone* decision has been amply demonstrated. New markets have been opened to the innovative enterprise of many companies; the public has benefitted from having a wide range of choices available when the individual user selects the terminal device or private system which will best serve his particular communications need; and there has been no actual demonstrable harm to the telephone system or its users."²²

Even AT&T admits that competition has spurred it to do a better job in meeting customer needs, as indicated in a recent article describing Bell's response to competition. Edward Goldstein, AT&T's Director of Product Management, said:

"Putting it bluntly, when a market need is identified for which there is no suitable Bell System manufactured equipment, either from a cost or feature or size standpoint, my people will spearhead an effort to obtain a suitable product—and this will include consideration of general trade products. The full significance of this is that it delineates how seriously earnest the Bell System is in meeting competition and remaining as your supplier of communications products and services."²³

IX. CONCLUSION

Based on Litton's experience in the communications industry both through its presence in the terminal equipment market and through its extensive par-

²¹ This is consistent with sound public policy. President Nixon's Task Force on Productivity and Competition recommended a major reorientation of regulatory policy with respect to this very point. In its report the Task Force stated:

"Entry of new firms should be encouraged wherever an absolute contradiction with regulatory goals is not involved. At present the practice is universally the opposite: to prohibit or ration with utmost severity the entrance of new firms." *President's Task Force Report on Productivity and Competition*, CCH Trade Reg. Rep., Current Comment, Para. 50,108.

²² Interstate and Foreign MTS and WATS, 35 FCC 2d, 539 at 542 (1972), quoted and cited with approval in *Televent Leasing et al.*, FCC Docket No. 19808, FCC 74-109, 39 Fed. Reg. 4942, at 4943 (February 8, 1974).

²³ *Telephony Magazine*, May 27, 1974, at p. 44.

ticipation in state regulatory proceedings, the following conclusions are submitted:

1. The Bell System is committed to maintaining the monopoly position it had in the telephone terminal equipment market throughout the areas served by its operating companies.

2. With ownership of 83% of all telephones in the United States and comparable or greater shares of the long distance transmission and local exchange service, and with total vertical integration into equipment manufacturing and supply, the Bell System has overwhelming market advantages that allow the use of many kinds of anticompetitive practices.

3. The state regulatory system is ineffective to deal with the predatory practices of the Bell System which are directed at eliminating competition in the telephone terminal equipment market.

4. As long as the present structure of the telephone terminal equipment market continues, new entry by competitors into the telephone terminal equipment market will be limited and the companies now struggling to compete will exist only at the sufferance of the Bell System.

5. If there is to be a viable, effectively competitive telephone terminal equipment market, substantial restructuring of the market is necessary.

6. Litton has offered a four-point restructuring plan which is simple, relatively easy to accomplish, and would result in minimal dislocation to the Bell System. No divestiture of business is required, only a gradual shift out of manufacturing of telephone terminal equipment by Western Electric. It is logical to assume the reduced production of terminal equipment by Western Electric would be offset by increased production of existing lines of non-terminal equipment needed to meet the expansion requirements of the Bell System so that Western Electric would not suffer substantial long term revenue loss from the phase-out.

7. Substantial public benefits would result from the restructuring:

a. The operating companies would not lose the revenue from their terminal equipment business, but to the extent that the operating companies are charging below cost for their terminal equipment, their cessation of this would ease their revenue requirements from general rate payers.

b. The burdens on the state regulatory commissions of having to face the competitive complaints now being made would be removed and they would be freer to devote their energies to their traditional regulatory problems.

c. The benefits of competition in telephone terminal equipment would be assured to users of the telephone network.

8. Redress against anticompetitive practices in the telephone terminal equipment market would be had through normal recourse to the courts and the antitrust laws.

As one final comment may I state that it is particularly frustrating for a company attempting to compete in the interconnect area to have to undertake substantial legal expenses in order to compete—which expenses are non-productive from the standpoint of providing lower cost and better service—while the utility companies opposing us so formidably on so many fronts are guaranteed to recover all of their costs plus earn a rate of return.

Thank you very much.

Exhibit A

THOMAS E. WOOD, INC.,
Cincinnati, Ohio, July 3, 1973.

Mr. DAVID T. CARTER,
Litton Business Telephone Systems,
11709 Chesterdale Road,
Cincinnati, Ohio.

DEAR DAVE: Tom Klinedinst has just reported to me that during his regular insurance meeting with Cincinnati Bell last week the subject of doing business with Litton was brought up.

The Cincinnati Bell officials were most emphatic with Tom in stating that any change in our present system plans would be most detrimental to our relationship. I'm sorry that we cannot continue to explore your plan.

Your patience and understanding throughout our discussions has been most appreciated.

Sincerely,

JOHN W. ANGUS,
Vice President.

Exhibit B

LITTON SYSTEMS, INC.,
August 30, 1973.

To: John A. Sandberg, Esquire.
From: Roger Silvestro.
Subject: Customer coercion.

Pointe Dodge Inc., 19391 Mack, Detroit, Michigan. Michigan Bell, Ken Meade, 6/73. Customer claims he sells trucks to Michigan Bell and knows they would stop doing business with him.

F. H. Construction, 22700 Wood St., St. Clair Shores, Michigan. Robert Martin, 7/73. Does work for Bell, and Bell will not give him any work if he went interconnect.

Silvers Inc., 16350 Woodward, Detroit, Michigan. Michigan Bell, Jerry Silvers. Bell would not buy his office equipment if he went interconnect.

Chamberlain Real Estate, 1985 W. Big Beaver, Troy, Michigan. Michigan Bell, Mr. Chamberlain. Does all of Bell's land purchases, had an interconnect company there, Bell said it would stop doing business with him.

ROGER SILVESTRO,
Sales Representative.

Exhibit C-1

LITTON SYSTEMS, INC.,
August 27, 1973.

To: John A. Sandberg
From: Geoffrey L. Flagstad
Subject: Customer Coercion by Illinois Bell
Customer's Name: International Harvester Company.
Person Talked To: Roy Fagan.
Date: Mid-August, 1973.
Times: Once.

Mr. Fagan of International Harvester indicated to me that they had investigated the possibility of interconnect telephone systems. As a result of this investigation, International Harvester has determined that interconnect might be injurious to the sale of their trucks to the operating telephone companies. He also indicated that this was the feeling expressed by personnel at Ford, General Motors and Chrysler.

In response to his stated reason for not doing business with Litton BTS, I sent a letter to the President, Mr. B. McCormick. Mr. McCormick designated the responsibility for replying to me to a Mr. James J. Harrington. His reply is attached. It would appear to be a repudiation of Mr. Fagan's statement. However, there is one major discrepancy. There have not been extensive discussions relative to the application of our equipment to International Harvester. On a de facto basis, it is unlikely that we will get any business from International Harvester, as the specifications would have to be provided by Mr. Fagan and he has already expressed an arbitrary opinion on the subject.

I trust that this report coincides with what you are looking for.
Enclosures.

P.S. On a separate occasion at a CSMA Seminar, Mr. Fagan expressed the same opinion to Mr. Robert Melis of our Midwest National Accounts Office. The seminar date was approximately June of this year.

Exhibit C-2

INTERNATIONAL HARVESTER COMPANY,
Chicago, Ill., August 23, 1973.

MR. GEOFFREY L. FLAGSTAD,
National Accounts Manager, Litton BTS,
4849 North Scott Street,
Schiller Park, Ill.

DEAR MR. FLAGSTAD: Your letter to Mr. McCormick has been referred to the writer. I can assure you that we are most interested in achieving lower costs, and it is our corporate policy to investigate all alternatives without regard to potential use of our product by suppliers.

I understand that there were extended discussions with our supervisors of communications as to the application of your equipment in our General Office. However, we have decided to proceed with our plans in using the Bell equipment to complement their installation of the Centrex system.

As you can appreciate, we are continuously reviewing proposals for modification and improvement of facilities. In this regard, we are currently investigat-

ing facilities in our regional sales offices and proposals are being made by various equipment manufacturers. We would be glad to provide you specifications as these facilities are reviewed. Specifications would be provided by Mr. Roy M. Fagan, supervisor of communications for the Company.

Very truly yours,

J. J. HARRINGTON.

Exhibit C-3

LITTON BTS.

Schiller Park, Ill., August 14, 1973.

Mr. B. McCORMICK, *President,*
International Harvester Company,
401 North Michigan Avenue,
Chicago, Ill.

DEAR MR. McCORMICK: I have been working with some large firms in the Chicago area and have proven to their Management that I can save them millions of dollars by implementation of the product I sell. Among these corporations are Admiral. Combined Insurance, Signode and Montgomery Ward.

I have been told by your people that International Harvester would not even consider use of my product because it might hurt their sales to the Telephone Company.

If you, indeed, believe this and are not interested in achieving lower costs, then I do not wish to pursue the matter any further. However, if you are interested in my services, I would be most pleased to discuss my product with anyone within your organization.

Thank you very much for your consideration.

Very truly yours,

LITTON BUSINESS TELEPHONE SYSTEMS,
GEOFFREY L. FLAGSTAD,

National Accounts Manager.

Exhibit D

LITTON BTS.

Raleigh, N.C., May 25, 1973.

OFFICE CORRESPONDENCE

To: John Sandburg.

From: Bob Ross.

Subject: Triangle Volkswagen Inc.

On May 16 Mr. S. A. Wallace, owner of this business, signed a Litton BTS Standard Equipment Lease Agreement and gave us his check for \$964.26 representing the advance payment of the first and last two monthly rental payments on the contract. The next day credit was approved by LICC, and a couple of days later the entire package was forwarded to Regional Plant Headquarters in Fort Lauderdale for processing.

On May 17 a letter was sent on Triangle Volkswagen stationery, signed by Mr. Wallace, to General Telephone announcing that Triangle Volkswagen had entered into a "contractual agreement with Litton Business Telephone Systems for the installation of an interconnect telephone system". On May 18 Bill Wilson, Raleigh Plant Manager, sent a letter to General Telephone announcing that Litton had entered into a "contractual agreement" and alerting General Telephone of our interface requirements.

On Friday, May 18, I had a phone call from Mr. Wallace, the customer, announcing that he had stopped payment on his check because General Telephone had come back in, apparently as a result of our letters to them, and gotten him upset about pricing and certain technical matters.

On Wednesday, May 23, I had a meeting with Mr. Wallace, at which time I presented our price schedule to him verifying that we had given essentially accurate information. Mr. Wallace called General Telephone and had the Communication Consultant come in. This man is Mr. John M. Beaulieu, Communication Consultant, General Telephone of the Southeast, P.O. Box 611, Durham, North Carolina 27702 (phone number 919/688-7346).

Mr. Beaulieu reviewed the figures I had presented to Mr. Wallace and verified their accuracy with the exception of a \$2.00 per line charge to be made by the Telephone Company for rotary dialing of business lines. This \$2.00 per line difference amounted to a total of \$12.00 per month, which did not upset the customer since we were still considerably less expensive than General Telephone. Mr.

John Beaulieu made some other remarks to the customer, in my presence, about the operational efficiency of our system versus theirs, the ability of our equipment to access a Chapel Hill FX line on touch tone, etc. I reassured the customer on these matters.

I then addressed myself to John Beaulieu and told him that the customer had signed a contract with Litton BTS and had given us his check for the advance payments; we had approved the credit, and our company had accepted the lease and was ordering the equipment. Mr. Beaulieu then said he would still like the opportunity of presenting some competitive price information to the customer.

I called Mr. Wallace at Triangle Volkswagen today, May 25, and he advised me that he has decided to cancel the whole deal. I asked him why, and he said that General Telephone had informed him there would be about a \$200.00 installation charge (apparently for interfaces), and I assured Mr. Wallace that we would pay this, but he still insists he wants to back out of the deal. Again I ask why, and he said that it was "just getting too complicated" and he didn't want to bother with it. I am to call him back next Tuesday, May 29, for one last ditch effort to save the deal, but I really feel it is irretrievable—due to direct General Telephone interference.

John, please review the above, and advise if you feel we have a good case.

BOB ROSS,
Branch Manager.

Exhibit E-1

LITCOM.
November 2, 1972.

To: L. Hoxie.

From: W. Groteke.

Subject: Telephone Company interference before and during cutover.

The attached letter describes a situation which our customer found disquieting and caused him enough concern to call me to find out if this was normal. He stated in the letter the lead Telephone Company installer tried to persuade our customer to cancel their lease and remain a customer of New York Telephone Company. Unable to persuade our customer to drop his lease with us the installer proceeded to cause as much trouble during cutover as possible. He went as far as to instruct our installers where to locate our distribution frame and refused to replace his equipment where our customer requested it to be replaced.

I thought this information would be useful. I think we should keep it on file at your office.

WALTER GROTEKE.

Exhibit E-2

HOLZMACHER, McLENDON AND MURRELL, P.C.,
CONSULTING ENGINEERS.

October 26, 1972.

Re Installation of Private Telephone System.

Mr. ARMAND R. LAVALLE,

Litcom, 560 Broad Hollow Road, Melville, New York.

DEAR MR. LAVALLE: This will confirm our recent conversation concerning the conduct of certain New York Telephone Company employees during our recent change over from a Telephone Company system to a Litcom telephone system.

Although the Supervisor of Personnel of the Telephone Company was fully cooperative during the recent switch over, the senior telephone installer of the two-man crew sent in by the phone company appeared to be greatly perturbed by the potential loss of business to phone company installers. On his first visit, he tried to explain to me all the problems that we were letting ourselves in for by switching to a private system. During the time of the actual change over, he was brusque, to say the least, and went from room to room yanking phones out as fast as he could, apparently in the hope that he would cut the phone company system before the Litcom system was ready to go. It would be an understatement to say that this individual did not appear to be expending himself to cooperate with Litcom employees during the change over.

Very truly yours,

HOLZMACHER, McLENDON & MURRELL, P.C.,
R. G. HOLZMACHER, P.L.

Exhibit F-1

SMIRNOFF BEVERAGE AND IMPORT COMPANY,
Hartford, Conn., March 6, 1973.

Mr. JOHN CLARK,
Communication Consultant, Southern New England Telephone Company, 125
South Main Street, West Hartford, Conn.

DEAR MR. CLARK: This letter will be your authorization for LITCOM, Division of Litton Industries, to act as our sole agent in our telephone affairs and requirements for our offices at 330 New Park Avenue, and 430 New Park Avenue, Hartford, Connecticut.

This authorization shall be in effect until you receive written notification from Smirnoff Beverage and Import Company to the contrary. Any further dealing or inquiries from Southern New England Telephone Company should be directed to the LITCOM local office at: 850 Third Avenue, New York, N.Y. 10022, telephone # 752-7900. They will be contacting you in a few days to order necessary interface devices for their system.

Your cooperation in this matter will be greatly appreciated to aid in a timely and orderly cut-over. Thank you for your assistance.

Very truly yours,

RICHARD A. JOHNSON,
Vice President, Administration & Control.

Exhibit F-2

SOUTHERN NEW ENGLAND TELEPHONE,
West Hartford, Conn., March 9, 1973.

Mr. RICHARD A. JOHNSON,
Vice President, Administration & Control,
Smirnoff Beverage and Import Company,
330 New Park Avenue,
Hartford, Conn.

DEAR MR. JOHNSON: We are in receipt of your letter dated March 6, 1973 authorizing LITCOM as your agent regarding telephone affairs for Smirnoff Beverage and Import Company.

We appreciate the opportunity to discuss some of the facts before an irrevocable decision is made on an interconnected communications system.

When it is necessary to evaluate communications systems, it is always difficult to make accurate and real comparisons. From past experience, we know that there is nothing worse than finding out too late that some vital pieces of information have not been considered as carefully as possible. With this in mind, I would like to offer our assistance to help you uncover and evaluate all of the important points regarding a possible change of system before SBIC makes a final decision.

Without knowledge of the contents of LITCOM's proposal, we can only express our concern in the form of questions for SBIC to consider.

1. One major concern is the cost and inconvenience of recabling the entire SBIC complex. If LITCOM provides your telephone system, SNET would supply only the cable entrance facilities. The huge task of installing cable between buildings and floors, terminal equipment to distribute pairs of wires within these cables and individual wire and cable for approximately 600 telephones would be the sole responsibility of LITCOM.

In addition, we would anticipate service problems in your conduit system. Since your existing system must be kept working, it would mean the installation of new conduits for new cabling in areas where existing conduits is filled to capacity.

It will be costly to recable a system of this size. The question is: are LITCOM's estimated costs for cable realistic, and will they satisfy SBIC's communications requirements for the next several years? Who pays for future cable expansions or changes, etc.? How will LITCOM serve other existing Heublein locations?

2. Has the need for a new telephone equipment room or equivalent space been discussed in detail?

3. What maintenance is provided, for how long, and at what cost? Will maintenance costs increase substantially over the life of the contract?

4. If you should need repair, what is a realistic response time to fix a minor telephone problem? A major system failure? What are the consequences for

being out of service for 2 hours or longer? How many LITCOM repairmen are there, and how far away are they?

5. In case of a disaster which destroys a portion of your telephone equipment, who pays to replace your system? Who will pay to insure your new equipment?

6. Will replacement of parts be readily available locally? What happens if your system becomes obsolete five (5) years from now?

7. What is the cost of adding and moving telephones? This is a very important question based on the large number of moves and changes presently completed each monthly by SNET. Are their labor costs subject to inflationary rises or are they fixed for the life of the contract?

8. Will LITCOM train your attendants and station users? For how long? Who will review your system to insure adequacy of switching equipment and attendant positions?

9. How many visits or contacts have you had in the past year with Bell System consultants, telephone training counselors, repair and installation personnel? Will you have the same requirement next year? What will it cost you?

10. Does LITCOM now have a staff of experts readily available to properly support all aspects of your telephone system? SNET has nearly 100 years of communications experience. After all, who knows more about telephones?

In the final analysis, we are asking once again that you give us the opportunity to review LITCOM's entire proposal before signing a firm contract with this company. We are most anxious to review the above-mentioned points and others with you at your earliest convenience.

Sincerely,

EDWARD E. CONCEISON,
Marketing Manager.

Exhibit G

December 19, 1973.

TO: John Sandberg

FROM: Jim Cotesworth

SUBJECT: Senator Hart's Investigation of the Telephone Company

In August of 1971, Ohio Bell filed an application for a general rate increase requesting approximately 38% increase in rates. In the City of Cleveland, interconnect was already beginning to show some effect on the sale of both PBX equipment and key telephone equipment. In that general rate application, Ohio Bell did not ask for an increase in the rates for some key equipment such as call directors but did ask for increases on such devices as interface units, line wink and hold features, etc. They also requested increases in PBX systems such as 701 PBX's and the 300 series PBX. However, the 300 series PBX, which is what interconnect was primarily selling against, had a requested increase of 10% whereas other services such as Centrex, for which they were not facing any competitive challenge in excess of 30% increase was requested.

This gave us some background as to their intentions. On 1/31/72 when the general rate case was still pending, Ohio Bell filed a new tariff outside the general rate case for their 100B package PBX system. The 100B included all the features associated with, what up until that time had been referred to as a 300 series PBX, but in essence offered those features at a much lower rate than the 300 or any other type PBX system.

It is interesting to note that prior to the filing of that 100 series PBX tariff Ohio Bell had through every technique available collected copies of all interconnect company proposals which would show them purchase prices and lease prices for the systems that interconnect companies were selling. That 100B tariff reflected Ohio Bell's interest to undercut the price of systems interconnect companies were selling.

When I called the PUCO questioning the grounds on which the same features were now being offered under a 100 at much lower rates than they had been under a 300 and also questioned the filing of that tariff outside the general rate case, I was told by Bernard Frohman of PUCO that Ohio Bell had wanted to get this system filed as quickly as possible and since it was, in essence, a reduction of rates to business customers, PUCO looked favorably on adoption of that 100 tariff because "any time the telephone company wants to reduce rates the PUCO is in favor of it." I further questioned Mr. Frohman on how the PUCO could approve two packages that provided the same features at two different rates, one much higher than the other, and he claimed that he was unaware that the 300 offered the same features at a higher price but supported the lower rate based on the fact that Ohio Bell had proposed using a 770 PBX for the

100 whereas they had proposed the 757 equipment to support the 300 series tariff.

The important point to note is that neither tariff filing specifies the type equipment Ohio Bell will use to provide the package features. As a result, there are systems using the 757 switch which are priced at 100 series rates although I know of no situation where the reverse is true. In one specific example, interconnect company was attempting to sell an interconnect system to a large company called Midvo, Inc. in Columbus, Ohio, who at the time had a 300 series PBX using 757 equipment. To combat our proposal, Ohio Bell simply recommended to Midvo that they change the name of their system to a 100 series PBX, thus substantially reducing the customer's rate and significantly undercutting the fair price which would have had to have been charged by the interconnect company.

Midvo followed the telephone company's recommendation with obvious glee and still has, to the best of my knowledge, 757 PBX equipment under 100 series rates.

During the time the general rate case was pending, Ohio Bell salesmen made a particular point of telling every prospect they contacted that although other Bell PBX systems might in fact increase in rates, the 770 would not. The 100 series PBX has had a telling effect on interconnect sales in the State of Ohio since that time.

The other situation I eluded to earlier which was the absence of a request for increase on call director telephones seemed to me to be an obvious ploy to combat the Tie 1030 systems, which was the other telephone system being sold against Ohio Bell tariffs at that time.

In addition, during the pending rate case Ohio Bell Re-tariffed their Touch Tone charges. Previously, Bell charged \$50 for the first 25 stations and \$1 per station thereafter for Touch Tone on any of their PBX equipment.

Today, charges for Touch Tone are accomplished through a \$2 surcharge per trunk with no charge being made for equipment in-house. This obviously gives Bell the edge as the surcharge per trunk applies whether equipment is privately owned or not.

Since these events were occurring during my employment with Arcata Communications, I do not have a large volume of case histories to quote to you today.

In one specific instance at Arcata, a company called Extra Truck Rental in Cleveland signed a purchase agreement, provided us with a check and all other necessary documents to bind the order, only call to a week or so later and plead with us to give them back the order. They said they had been advised that if they bought an interconnect system, Ohio Bell would stop leasing its trucks from Extra Truck Rental. The president was obviously fearful for a major portion of his business. Wanting to keep our customer out of the middle of battle between Arcata and Bell, we returned the check and destroyed the contract. The customer requested that these facts not be in writing and Arcata agreed.

Events taking place at Litton BTS in Cleveland that are not documented from Ohio Bell in writing are as follows:

Shaker Ford and Commerce Ford, both Litton customers, have lost maintenance contracts on Bell trucks and are not invited to bid on vehicles to be used by Ohio Bell.

Carpenter Printing, a good prospect that currently has a 300 series Bell system will not entertain the concept of an interconnect system with anyone because they fear the loss of a major portion of their business, which is the printing of the white and yellow pages for Ohio Bell.

Another anti-competitive situation that we face in Ohio is similar to that faced by interconnect companies throughout the country; that is simply that the advertising money that is being put into stopping interconnect company sales and/or making prospects fearful to talk with us. Ohio Bell directs massive advertising against interconnect companies, specifically warning businessmen from doing business with interconnect suppliers. Their advertising budget for this purpose unquestionably exceeds the operating budgets for all the interconnect companies in the state.

Another questionable practice is one of using their monopolistic position in the network market place to gather information for their marketing organization that would not be available to them otherwise. The best example I can give you was exemplified by the Ohio Bell documents sent to your office in Sunnyvale some weeks back.

JIM COTESWORTH.

EXHIBIT 2.—*Excerpt from Committee Print Entitled "Federal Advisory Committees," First Annual Report of the President to the Congress, Including Data on Individual Committees, March 1973, Subcommittee on Budgeting, Management, and Expenditures of the Committee on Government Operations, United States Senate, Re Professional Employees involved in Regulation of the Communications Industry*

(January 7, 1974)

Bell Telephone Co. of Pennsylvania

—Federal Communications Commission—Radio Technical Commission for Marine Services—Assembly.

Bell Telephone Laboratories

Gordon, Eugene I. (Ch), U.S. Department of Defense—Director of Defense Research and Engineering—Advisory Group on Electron Devices—Special Devices.

Miller, Robert C., U.S. Department of Defense—Director of Defense Research and Engineering—Advisory Group on Electron Devices—Special Group on Optical Masers.

Baker, William O., National Security Agency—Scientific Advisory Board.

McDonald, Henry S., National Security Agency—Scientific Advisory Board—Electronics and Data Processing Advisory Panel.

Baker, William O., U.S. Department of Health, Education, and Welfare—National Institutes of Health—Board of Regents of National Library of Medicine.

Adams, E. W. Jr., U.S. Department of State—Advisory Committee on International Industrial Property Panel.

Lund, N., Federal Communications Commission—Radio Technical Commission for Marine Services—Assembly.

Schoenwiesner, R. C., Federal Communications Commission—Radio Technical Commission for Marine Services—Assembly.

Michael, H. J., Federal Communications Commission—Radio Technical Commission for Aeronautics.

Michael, H. J., Federal Communications Commission—Special Committee 120.

Hornbeck, John A., National Aeronautics and Space Administration—Aerospace Safety Advisory Panel.

Prim, Robert C., National Science Foundation—Advisory Committee for Research.

Giordmaine, Joseph A., National Science Foundation—National Magnetic Laboratory Visiting Committee.

Mathews, M. V., National Science Foundation—Advisory Committee for Computing Activities.

Pollak, Henry O., National Science Foundation—Advisory Panel for Mathematical Sciences.

Klauder, John R., National Science Foundation—Advisory Panel for Physics.

Herring, W. Sonyers, National Science Foundation—Science Information Council.

Prim, Robert C., National Science Foundation—Advisory Committee for Engineering.

Baker, William O., National Science Foundation—Industry Relations Committee.

Bell Laboratories

Pierce, John Robinson, U.S. Department of Defense—Defense Communications Agency—Scientific Advisory Group.

Baker, William O., U.S. Department of Defense—Air Force Systems Command Board of Visitors.

Buchsbaum, S. J., U.S. Atomic Energy Commission—Standing Committee on Controlled Thermonuclear Research.

McMillan, Brockway, National Aeronautics and Space Administration—Space Program Advisory Council—Applications Committee.

Ross, Ian M., National Aeronautics and Space Administration—Space Program Advisory Council—Space Systems Committee.

Barnett, W. T., U.S. Department of State—U.S. International Radio Consulting Committee—Study Group V.

Chesapeake & Potomac Telephone Co.

Bolger, Thomas E., U.S. Department of Transportation—Secretary's U.S. International Transportation Exposition Committee.

Farrell, W. C., Federal Communications Commission—Radio Technical Commission for Marine Services—Assembly.
 Miller, A. G., Federal Communications Commission—Radio Technical Commission for Marine Services—Assembly.

Illinois Bell Telephone

Schleicher, G. P., Federal Communications Commission—Radio Technical Commission for Marine Services—Assembly.

Michigan Bell Telephone Co.

Foss, Edward, U.S. Department of Agriculture—Forest Service—Oregon Dunes National Recreation Area Advisory Council.
 ———Federal Communications Commission—Radio Technical Commission for Marine Services—Assembly.

Mountain States Telephone and Telegraph

———Federal Communications Commission—Radio Technical Commission for Marine Services—Assembly.

New England Telephone & Telegraph Co.

Skinner, George A., U.S. Department of Labor—Business Research Advisory Council—Committee on Manpower and Employment.
 ———Federal Communications Commission—Radio Technical Commission for Marine Services—Assembly.

New Jersey Bell Telephone Co.

Wodehouse, Charles, U.S. Department of Labor—National Manpower Advisory Committee—North Atlantic Regional Manpower Advisory Committee.
 ———Federal Communications Commission—Radio Technical Commission for Marine Services—Assembly.

New York Telephone Co.

Goldstein, Edward, U.S. Department of Defense—U.S. Army Electronics Command—Electronics Advisory Group.
 Hall, Guin B., U.S. Department of Health, Education, and Welfare—Secretary Advisory Committee—Region II,
 ———Federal Communications Commission—Radio Technical Commission for Marine Services—Assembly.
 Post, A. W., Federal Communications Commission—Radio Technical Commission for Marine Services—Assembly.
 Mattern, Edwin P., Federal Communications Commission—Radio Technical Commission for Marine Services—Special Committee 59.

Northwestern Bell Telephone Co.

Williams, Frank P., U.S. Department of Defense—National Advisory Council.
 Devereaux, Richard A., U.S. Department of Labor—National Manpower Advisory Committee—Mountain States Regional Manpower Advisory Committee.

Ohio Bell Telephone Co.

Mattern, R.M., Federal Communications Commission—Radio Technical Commission for Marine Services—Assembly.

Pacific Northwest Bell

Lefgren, Omar, U.S. Department of Agriculture—Challis National Forest Cattle-men's Advisory Board.
 Piggott, William H., U.S. Department of the Interior—Bonneville Regional Advisory Council—Portland.
 Wolfard, I. L., U.S. Department of the Interior—Bonneville Regional Advisory Council—Portland.
 ———Federal Communications Commission—Radio Technical Commission for Marine Services—Assembly.
 Kunner, R.M., Federal Communications Commission—Radio Technical Commission for Marine Services—Assembly.

Pacific Telephone & Telegraph Co.

Moore, Lyle J., Federal Communications Commission—Radio Technical Commission for Marine Services—Special Committee 59.
 King, Elizabeth S., U.S. Department of Commerce—Census Advisory Committee on the American Statistical Association.
 ———Federal Communications Commission—Radio Technical Commission for Marine Services—Assembly.

Hatt, H. J., Federal Communications Commission—Radio Technical Commission for Marine Services—Assembly.

Nelson, L. O., Federal Communications Commission—Radio Technical Commission for Marine Services—Assembly.

South Central Bell Telephone Co.

Smith, Frank T., U.S. Department of Labor—National Manpower Advisory Committee—Southeastern Regional Manpower Advisory Committee.

Bates, Frank E., Federal Communications Commission—Radio Technical Commission for Marine Services—Assembly.

Southern Bell Telephone Co.

Jennette, Sid E., U.S. Department of Labor—National Manpower Advisory Committee—Southeastern Regional Manpower Advisory Committee.

———Federal Communications Commission—Radio Technical Commission for Marine Services—Assembly.

Southern New England Telephone Co.

Rascati, S. J., Federal Communications Commission—Radio Technical Commission for Marine Services—Assembly.

Southwestern Bell Telephone Co.

Alston, A. S., U.S. Department of Commerce—National Industrial Pollution Control Council—Utilities Sub-Council.

Trottmann, Stuart R. Jr., U.S. Department of Commerce—National Industrial Pollution Control Council—Utilities Sub-Council.

———Federal Communications Commission—Radio Technical Commission for Marine Services—Assembly.

Western Electric Co.

Brown, Donald G., U.S. Department of Commerce—President's Advisory Council on Minority Business Enterprise.

Dwyer, Virginia A., U.S. Department of Commerce—Economic Advisory Board.

Grant, Donald C., U.S. Department of Defense—National Advisory Board.

Laubach, Alexander, U.S. Department of Justice—Private Security Advisory Council—Committee on Guards and Investigation.

Dwyer, Virginia A., U.S. Department of Labor—Business Research Advisory Council—Committee on Consumer Wholesale Prices.

Dwyer, Virginia A., U.S. Department of Labor—Business Research Advisory Council—Committee on Productivity and Technological Developments.

Brown, M. E., Federal Communications Commission—Cable Television Advisory Committee—Panel 4.

EXHIBIT 3.—*Library of Congress Survey Re Number of Professional Employees Involved in Regulation of Communications*

May 8, 1974.

MEMORANDUM

To: Gerald Hellerman.

From: Brad Manson.

Re: State Regulatory Commission Staffs.

The Library of Congress surveyed 58 regulatory agencies and commissions located throughout the United States to determine the number of professional employees—lawyers, financial analysts, and engineers—involved in the regulation of the communications industry. Five of those commissions reported that they did not regulate any aspect of the communications industry, and seven others failed to respond to the survey.¹ The 46 state agencies and commissions that did respond to the survey indicated that they employed 459 full-time and 177 part-time professionals to regulate this industry.²

¹ State utility commissions that did not respond were: Louisiana Public Service Commission, New Hampshire Public Utilities Commission, New Mexico Public Service Commission, Ohio Public Utilities Commission, Oklahoma Corporation Commission, Oregon Public Utility Commission, and South Dakota Public Utilities Commission.

² The commissions employed: 119 full-time and 54 part-time lawyers; 160 full-time and 64 part-time financial analysts; and, 158 full-time and 29 part-time engineers.

THE LIBRARY OF CONGRESS,
CONGRESSIONAL RESEARCH SERVICE,
Washington, D.C., February 21, 1974.

To: Senate Antitrust & Monopoly Legislation Subcommittee; Attention: Mr. Gerry Hellerman.

From: Economics Division.

Subject: State Regulatory Agencies: number of employees involved in communications.

I. The following letter was sent to State regulatory utility commissions in response to your request for information on State regulatory agencies charged with responsibility for the communications industry.

DEAR SIRs: The Congressional Research Service of the Library of Congress has been asked to make a study of state regulatory commissions charged with responsibility for the communications industry in their respective states. To aid us in the study we would be obliged if you would provide the following information:

The total number of persons employed by your commission who are involved in the regulation of the communications industry. -----

The number of persons employed by your commission in a professional capacity who are involved in the regulation of the communications industry. -----

The number of lawyers employed by your commission who are involved in the regulation of the communications industry. -----

The number of financial analysts employed by your commission who are involved in the regulation of the communications industry. -----

The number of engineers employed by your commission who are involved in the regulation of the communications industry. -----

Will you please return the completed questionnaire to:

Ms. Sara Hines,
CRS—Economics Division,
Library of Congress,
Washington, D.C. 20540.

Thank you very much for your help.

Sincerely,

JOHN B. HENDERSON,
Chief, Economics Division.

II. The following is a list of the State regulatory utility commissions which were contacted.

Alabama Public Service Commission, P.O. Box 991, Montgomery, Ala. 36102, 205-269-6011.

Alaska Public Utilities Commission, 1100 MacKay Bldg., 338 Denali St., Anchorage, Alaska 99501, 907-272-1487.

Alaska Transportation Commission, 1000 MacKay Bldg., 338 Denali St., Anchorage, Alaska 99501, 907-279-1451.

Arizona Corporation Commission, 1688 West Adams, Room 216, Phoenix, Ariz. 85007, 602-271-4241.

Arkansas Public Service Commission, Justice Bldg., Little Rock, Ark. 72201, 501-371-2570.

Arkansas Transportation Commission,¹ Justice Bldg., Little Rock, Ark. 72201, 501-371-1341.

California Public Utilities Commission, California State Bldg., 350 McAllister St., San Francisco, Calif. 94102, 415-57-1487.

Colorado Public Utilities Commission, 1845 Sherman St., Denver, Colo. 80203, 303-892-3154.

Connecticut Public Utilities Commission, State Office Bldg., 165 Capitol Ave., Hartford, Conn. 06115, 203-566-2104.

Delaware Public Service Commission, Old State House Annex, Dover, Del. 19901, 302-678-4247.

District of Columbia Public Service Commission, Cafritz Bldg., 1625 I St., N.W., Washington, D.C. 20006, 202-629-2301.

Florida Public Service Commission, 700 South Adams St., Tallahassee, Fla. 32304, 904-488-1001.

Georgia Public Service Commission, 162 State Office Bldg., 244 Washington St., S.W., Atlanta, Ga. 30334, 404-656-4501.

Hawaii Public Utilities Commission, P.O. Box 541, Honolulu, Hawaii 96809, 808-548-350.

Idaho Public Utilities Commission, Statehouse, Boise, Idaho 83720, 208-384-3420.

- Illinois Commerce Commission, Leland Bldg., 527 East Capitol Ave., Springfield, Ill. 62706, 217-525-7295 and 160 North La Salle St., Chicago, Ill. 60601.
- Indiana Public Service Commission, 901 State Office Bldg., Indianapolis, Ind. 46204, 317-633-5359.
- Iowa State Commerce Commission, State Capitol, Des Moines, Iowa 50319, 515-281-5309.
- Kansas State Corporation Commission, State Office Bldg., Topeka, Kans. 66612, 913-296-3326.
- Kentucky Department of Transportation,¹ State Office Bldg., Frankfort, Ky. 40601, 502-564-4540.
- Kentucky Public Service Commission, P.O. Box 496, Frankfort, Ky. 40601, 502-564-3940.
- Kentucky Railroad Commission, 10th Floor, State Office Bldg., Frankfort, Ky. 40601, 502-564-4640.
- Louisiana Public Service Commission,² Capitol Station, Baton Rouge, La. 70804, 504-389-5867.
- Maine Public Utilities Commission, State House Annex, Capitol Shopping Center, Augusta, Maine 04330, 207-289-2448.
- Maryland Public Service Commission, 904 State Office Bldg., 301 West Preston St., Baltimore, Md. 21201, 301-383-2366.
- Massachusetts Department of Public Utilities, 100 Cambridge St., Boston, Mass. 02202, 617-727-3500.
- Michigan Public Service Commission, Law Bldg., 5th Floor, 525 West Ottawa St., Lansing, Mich. 48913, 517-373-3244.
- Minnesota Public Service Commission, 400 State Office Bldg., St. Paul, Minn. 55155, 612-296-6176.
- Mississippi Public Service Commission, Walter Sillers State Office Bldg., P.O. Box 1174, Jackson, Miss. 39205, 601-354-7474.
- Missouri Public Service Commission, Jefferson Bldg., Jefferson City, Mo. 65101, 314-751-3234.
- Montana Public Service Commission, 1227 11th Ave., Helena, Mont. 59601, 406-449-3007.
- Nebraska Public Service Commission, 1324 M St., 3d Floor, Lincoln, Nebr. 68508, 402-475-2641.
- Nevada Public Service Commission, 222 East Washington St., Carson City, Nev. 89701, 702-882-7341.
- New Hampshire Public Utilities Commission,² 26 Pleasant St., Concord, N.H. 03301, 603-271-2452.
- New Jersey Board of Public Utility Commissioners, 101 Commerce St., Newark, N.J. 07102, 201-648-2057.
- New Mexico Public Service Commission,² State Capitol Bldg., Santa Fe, N. Mex. 87501, 505-827-2827.
- New Mexico State Corporation Commission, P.O. Drawer 1269, Santa Fe, N. Mex. 87501, 505-827-2271.
- New York Public Service Commission, 44 Holland Ave., Albany, N.Y. 12208, 518-474-7080, and 2 World Center, New York, N.Y. 10047, 212-488-4390.
- New York State Department of Transportation,¹ 1220 Washington Ave., Building 5, State Campus, Albany, N.Y. 12226, 518-457-1016.
- North Carolina Utilities Commission, P.O. Box 991, Raleigh, N.C. 27602, 919-829-7328.
- North Dakota Public Service Commission, State Capitol Bldg., Bismarck, N. Dak. 58501, 701-224-2411.
- Ohio Public Utilities Commission,² 111 North High St., Columbus, Ohio 43215, 614-466-3791.
- Oklahoma Corporation Commission,² Jim Thorpe Office Bldg., Oklahoma City, Okla. 73105, 405-521-2351.
- Oregon Public Utility Commissioner,² 200 Public Service Bldg., Salem, Oreg. 97310, 503-378-6604.
- Pennsylvania Public Utility Commission, P.O. Box 3265, Harrisburg, Pa. 17120, 717-787-6416.
- Rhode Island Public Utilities Commission, 169 Weybosset St., Providence, R.I. 02903, 401-277-2443.
- South Carolina Public Service Commission, P.O. Box 11649, Columbia, S.C. 29211, 803-758-3621.
- South Dakota Public Utilities Commission,² Capitol Bldg., Pierre, S. Dak. 57501, 605-224-3203.
- Tennessee Public Service Commission, C1-102 Cordell Hull Bldg., Nashville, Tenn. 37219, 615-741-2904.

Texas Aeronautics Commission,¹ Suite 1104, State Finance Bldg., P.O. Box 12607, Capitol Station, Austin, Tex. 78711, 512-475-4768.
 Texas Railroad Commission² Drawer 12967, Capitol Station, Austin, Tex. 78711, 512-475-2439.
 Utah Public Service Commission, 330 East 4th South St., Salt Lake City, Utah 84111, 801-328-5515.
 Vermont Public Service Board, 7 School St., Montpelier, Vt. 05602, 802-828-2321.
 Virginia State Corporation Commission, Blanton Bldg., P.O. Box 1197, Richmond, Va. 23209, 804-770-0000.
 Washington Utilities and Transportation Commission, Highways-Licenses Bldg., Olympia, Wash. 98504, 206-753-6423.
 West Virginia Public Service Commission, Room E-217, Capitol Bldg., Charleston, W. Va. 25305, 304-348-2182.
 Wisconsin Public Service Commission, 432 Hill Farms State Office Bldg., Madison, Wis. 53702 608-266-1241.

III. The information obtained from the various respondents is as follows:

PERSONS INVOLVED IN THE REGULATION OF THE COMMUNICATIONS INDUSTRY

State commission	Total	Professionals	Law-years	Financial analysts	Engineers
Alabama Public Service Commission.....	12	0	2	6	6
Alaska Public Utilities Commission.....	28	7	1	3	3
Arizona Corporation Commission.....	13	13	11	11	11
Arkansas Public Service Commission.....	27	13	1	6	4
California Public Utilities Commission.....	28	30	3-4	3-4	24
Colorado Public Utilities Commission.....	40	26	12	6	6
Delaware Public Service Commission.....	9	2	1	1	0
District of Columbia Public Service Commission.....	123	14	12	0	10
Florida Public Service Commission.....	15	4	7	4	4
Georgia Public Service Commission.....	29	9	1	3	5
Hawaii Public Utilities Commission.....	30	19	2	1	3
Idaho Public Utilities Commission.....	15	5	1	1	0
Illinois Commerce Commission.....	7	3	2	2	3
Indiana Public Service Commission.....	16	5	2	2	1
Iowa State Commerce Commission.....	10	5	2	2	1
Kansas State Corp. Commission.....	25	14	7	4	6
Kentucky Public Service Commission.....	12	12	7	3	2
Kentucky Railroad Commission.....	7	3	1	1	0
Louisiana Public Service Commission.....	10	2	1	5	2
Maine Public Utilities Commission.....	12	12	2	2	3
Maryland Public Service Commission.....	31+(26)	31+(20)	3(9)	3(4)	6
Michigan Public Service Commission.....	34+(11)	33+(9)	3(3)	3(4)	33+(2)
Minnesota Public Service Commission.....	25½	23	2½	2½	21
Mississippi Public Service Commission.....	10	5	1	1	2
Missouri Public Service Commission.....	196	167	117	123	111
Montana Public Service Commission.....	5	4	2	1	0
Nebraska Public Service Commission.....	17	1	3	2	1
Nevada Public Service Commission.....	157	120	15	17	14
New Jersey Board of Public Utilities Commission.....	140	139	19	122	16
New Mexico State Corp. Commission.....	4	1	0	0	0
New York Public Service Commission.....	130	92	5	2	28
North Carolina Utilities Commission.....	44	38	7	3	9
North Dakota Public Service Commission.....	10	5	1	2	2
Pennsylvania Public Utility Commission.....	66	66	17	50	15
Rhode Island Public Utilities Commission.....	3	1	11	0	0
South Carolina Public Service Commission.....	3	1	2	0	2
Tennessee Public Service Commission.....	29	16	3	2	2
Utah Public Service Commission.....	13	5	0	2	1
Vermont Public Service Board.....	22½	2	2½	21	21
Virginia State Corp. Commission.....	28	10	3	3	4
Washington Utilities & Transportation Commission.....	110	14	11	11	11
West Virginia Public Service Commission.....	45	25	10	25	3
Wisconsin Public Service Commission.....	20	14	2	7	5
Wyoming Public Service Commission.....	115	111	11	11	14

¹ Although the questionnaire did not distinguish between full and part-time employees, the respondent noted that the number listed referred to part-time employees.

² The respondent noted that employees involved in the regulation of communications at the particular commission were not involved solely in such regulation, thus the number listed refers to the equivalent of full-time workers when the work hours devoted to communications regulation by part-time workers is added up.

³ Respondent differentiated between full-time and part-time employees, since commission employed both types of workers in the regulation of communications. Number in parentheses (X) indicates part-time workers.

SARA HINES,
Economic Analyst.

¹ Commission is not involved in the regulation of the communications industry.

² Commission did not respond to the survey.

EXHIBIT 4. *Illinois Commerce Commission Petition to Suspend, and Complaint as to, Proposed Tariff Re Com-Key 718*

STATE OF ILLINOIS,
ILLINOIS COMMERCE COMMISSION,
Springfield, Ill., November 29, 1973.

Ms. BARBARA B. HIRSCH,
208 South LaSalle Street,
Chicago, Ill.

DEAR Ms. HIRSCH: Pursuant to our telephone conversation on November 21, 1973, I am returning herewith the documents you have labeled as "Petition to Suspend Proposed Tariff and Complaint as to Proposed Tariff" as filed under Advice 3524 of Illinois Bell Telephone Company.

The tariff of Illinois Bell Telephone Company, as filed under Advice 3524, was received in the Commission's office on October 25, 1973 and had an effective date of November 25, 1973. Thus the Telephone Division of the Commission transmitted its recommendation to the Commission on November 21, 1973. As you realize the Commission did not meet beyond the 21st since the 22nd was Thanksgiving and the 23rd was a state holiday.

The Secretary's office received your telephone call around 1 o'clock on November 20th and they transmitted the information to me, advising that you did have an objection to the tariff. However, I did not know the parties you represented or any other details, only the fact that you did have a client who objected to the filing of Illinois Bell Telephone Company. I personally advised the Commission that you were sending in some kind of document in opposition to the Illinois Bell filing in Advice Letter 3524 involving the Com Key set. Thus the Commission was well aware of your position concerning this tariff but nevertheless went ahead and permitted the tariff to be passed to file and it became effective on November 25, 1973.

Your petition to suspend and complaint as to the proposed tariff was received in the Commission's office at 2:15 P.M. on the 21st after the Commission had adjourned for the week. The language of this document relates to the suspension of a tariff and naming Illinois Bell Telephone Company as respondent, which would no longer be appropriate. Thus I am returning the document to you as it is no longer possible to suspend the tariff in accordance with Section 36 of the Public Utilities Act.

As I mentioned in our telephone conversation, the Commission will set for hearing a formal complaint on this subject matter if you wish to further challenge the tariff filing of Illinois Bell Telephone Company.

If you have any questions please advise.

Yours very truly,

J. W. KISSEL, JR.,
Chief Telephone Engineer.

Enclosure.

STATE OF ILLINOIS

ILLINOIS COMMERCE COMMISSION

In the Matter of the Petition to Suspend and Complaint of Executone Company of Chicago, Inc., Allcom Inc., Modern Communications, Inc., Stromberg Carlson Communications, Inc. and Katy Communications, Inc. against Illinois Bell Telephone Co., as to Advice 3524, proposed tariff relating to Com Key 718, issued October 25, 1973, effective November 25, 1973, ILL. C. C. No. 1, Index Thirty-Seventh Revised Sheet 3, Canceling Thirty-sixth Revised Sheet 3: ILL. C. C. No. 1, Section 20, Fourth Revised Sheet 31, Canceling Third Revised Sheet 31; ILL. C. C. No. 1, Section 20, Original Sheet 31.05

PETITION TO SUSPEND PROPOSED TARIFF AND COMPLAINT AS TO PROPOSED TARIFF

The Petitioners, move The Commission for immediate suspension and permanent disallowance of the above proposed tariffs, hereinafter referred to as "Com Key 718".

1. Petitioners are:

Executone Co. of Chicago, Inc., 453 South Vermont Street, Palatine, Illinois 60067; Allcom Inc., 5240 North Otto, Rosemont, Illinois; Modern Communications, Inc., 8333 Niles Center, Skokie, Illinois; Katy Communications, Inc., 1805 Busse, Mount Prospect, Illinois; Stromberg Carlson Communications, Inc., 7366 North Lincoln, Lincolnwood, Illinois.

2. Petitioners are engaged in the interconnect industry; a substantial portion of their businesses is the sale, leasing, installation, and service of key telephone equipment; all are in competition with Illinois Bell Telephone Company; all are doing business in the State of Illinois.

3. Illinois Bell Telephone Company, Respondent herein, is a Public Utility, and that as such Utility said Respondent is subject to the provisions of an Act to provide for the regulations of Public Utilities.

4. That the post office address of Respondent is 225 West Randolph Street, Chicago, Illinois 60606.

5. The proposed Com Key 718 tariff is non-compensatory and not cost-justified in its entirety both as to initial nonrecurring charges and as to feature charges as set forth in paragraph 6 below.

6. The Com Key 718 tariff offers more features at lower prices than the "call directors" and also offers certain identical features to "call directors" and those are offered in Com Key 718 at lower prices as such obsoletes Illinois Bell Telephone's capital investment in "call directors," is prejudicial and discriminatory to "call director" users and is anticompetitive and predatory:

For example:

A. In a feature by feature comparison of charges:

	Call director, existing tariff	Com Key, proposed tariff
10-button phone.....	¹ \$12.00	\$7.50
Extension.....	² 1.15	(³)
KL (line).....	3.00	1.50
Central equipment.....	(³)	30.00
Intercom (2 path).....	35.00	(³)
Intercom touch tone.....	42.50	10.00

¹ \$10 proposed tariff in issue in general rate case.

² \$1.40 proposed tariff in issue in general rate case.

³ No charge.

B. Furthermore in a system to system comparison:

I.

15 STATIONS—6 LINES—ROTARY—1 PATH CAMLINE, BELL CALL DIRECTORS

15 call directors at \$12.....	\$180.00
6 line lights at \$3.....	18.00
9 extension charges at \$1.15.....	10.35
1 Path Comline—first four stations.....	7.50
11 additional Comline stations at \$1.25.....	13.75
Total.....	229.60

COM KEY 718

System includes as standard: 2-path Comline, button restoration, one-way page speaker, and trunk-to-trunk conferencing.

1 basic system.....	\$30.00
15 718 instruments at \$7.50.....	112.50
6 line equipment at \$1.50.....	9.00
No extension charges or Comline charges.....	

Total.....	151.50
Savings over Call Director \$78.10, or 34%.	

II.

15 STATIONS—6 LINES—ROTARY—2 PATH COMLINE

15 call directors at \$12.....	\$180.00
6 line lights at \$3.....	18.00
9 extension charges at \$1.15.....	10.35
2 Path rotary Comline—First 10 stations.....	35.00
5 additional Comline stations at \$2.....	10.00
Total.....	253.35

COM KEY 718

Same as above 151.50
 Savings over call director \$101.85, or 40.2%.

III.

18 STATIONS—7 LINES—TOUCH TONE—2 PATH COMLINE
 CALL DIRECTORS

18 call directors at \$12	\$216.00
7 line lights at \$3	21.00
11 extensions at \$1.15	12.65
2 Path touch tone Comline—First 10 stations	42.50
8 additional Comline stations at \$2	16.00
Total	308.15

COM KEY 718

1 basic system	\$30.00
1 touch tone	10.00
18 718 instruments at \$7.50	135.00
7 line equipment at \$1.50	10.50
Total	185.50

Savings over call director \$122.65, or 39.8%.

C. 2 Path Comline is available on "call director" only with added charge. Button Restoration, One-Way Page Speaker, and Trunk To Trunk Conferencing are not available on the more expensive "call director," but are included in the less expensive Com Key 718.

7. Illinois Bell Telephone Company has for several months prior to its tariff filing, advised potential interconnect customers of the Com Key 718 and has installed "call directors" for said customers, promising a subsequent change to Com Key 718, and, in such cases, has waived the initial nonrecurring "call director" charge although the tariffs prescribe such a charge and although other Illinois Bell Telephone Company "call director" customers have been and are paying that charge.

Wherefore: Petitioners pray that:

(a) the Commission suspend approval and effectuation of the aforesaid proposed tariff; and

(b) the Commission grant a hearing on the proposed tariff; and

(c) the respondent be required to answer the charges herein; and

(d) the respondent be restrained and enjoined permanently and during the pendency of this matter from offering the Com Key 718 under the proposed tariff or under a "special authority" tariff; and

(e) the respondent be restrained and enjoined permanently and during the pendency of this matter from offering varying or reducing or offering waivers of "Call director" charges covered by tariffs heretofore approved by this Commission; and

(f) Upon a final hearing hereof, the Commission will make such order in the premises as may be appropriate.

Dated: At Chicago, Illinois this 20th day of November, 1973.

By: BARBARA B. HIRSCH,
 Attorney for Petitioners,
 208 South LaSalle Street
 Chicago, Illinois 60604
 312-346-5953.

VERIFICATION

I, Barbara B. Hirsch being first duly sworn upon oath depose and say that I am attorney for petitioners herein; that I have read the contents of the above and foregoing Petition to Suspend Proposed Tariff and Complaint as to Proposed Tariff, and know the contents thereof and to the best of my knowledge and belief said contents are true, in substance and in fact.

Subscribed and Sworn to before me this 20th day of November, 1973.

Notary Public

EXHIBIT 5.—*Prepared Testimony of Frank E. Fitzpatrick, Litton Systems,
Before California Public Utilities Commission Interface Investigation*

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Case No. 9625 (Filed October 24, 1973)

Investigation on the Commission's own motion into the promulgation of a General Order providing for the procedures and standards to be followed for the interconnection of customer-provided communications terminal equipment to the telecommunications facilities of intrastate telephone utilities

PREPARED TESTIMONY OF FRANK E. FITZPATRICK ON BEHALF OF LITTON SYSTEMS, INC.

Question. Please state your name and address.

Answer. My name is Frank E. Fitzpatrick. I live at 3261 Brace Street, Burbank, California.

Question. By whom are you employed and in what capacity?

Answer. I am employed by Litton Business Telephone Systems, usually referred to as Litton BTS, in their Los Angeles office at 5300 Santa Monica Boulevard, as a Senior Communications Coordinator. In this capacity I advise potential customers as to the telephone station equipment and peripheral equipment that would best suit their business and service requirements and design installations to fill those needs. These installations consist basically of PBX and key telephone systems for interconnection with the public telephone networks of the Pacific Telephone and Telegraph Company and the General Telephone Company of California. This requires a familiarity with the design and operating characteristics of the public telephone network and of the design and characteristics of the various pieces of telephone station and peripheral equipment available on the market.

My duties with Litton BTS have also included district operations manager for the Los Angeles area. This involved directing all of the installation and service activities relating to telephone terminal equipment installations by Litton BTS in the Los Angeles area.

Question. How long have you held these positions with Litton BTS?

Answer. Since May, 1973.

Question. Please state your experience in the telephone business prior to joining Litton BTS.

Answer. Prior to going to work for Litton I was Vice President of engineering for Amplicom, Inc., North Hollywood, California. I held this position from August 1972 to April 1973. In this position I was responsible for the design, development, and production of solid state peripheral telephone systems, consisting of toll diverting, WATS timers, and other related systems. In addition, I was responsible for the installation and maintenance of telephone station equipment systems consisting of PABX and key equipment manufactured by Nippon Electric Company (NEC) and ITT.

From June 1972 to August 1972 I was General Manager for the Computer-guard Alarm Company in Burbank, California, which manufactured and marketed central station alarm systems utilizing the telephone network. My duties consisted of overall management, formulating sales and expense projections, and documenting major goals for the company. During the time I held this position, monthly operating expenses were reduced by 20% and sales were increased by 11%.

From July 1971 to June 1972 I was Plant Manager for Westel Telephone Communications, Inc. Westel was engaged in designing, selling, installing and maintaining telephone station equipment systems for customers of Pacific Telephone and General Telephone Companies in California. My duties included designing and marketing such systems embodying PABX, key and associated peripheral equipment, and supervising the installation and maintenance of these systems on customers' premises.

From August 1970 to July 1971 I was Project Engineer in the Systems Engineering Group of C. P. Clare & Company, in Chicago, Illinois. In this capacity I was directly responsible for the design, development, marketing and costing of various auxiliary telephone systems. One was a touchtone to dial

pulse conversion system for installation in telephone company step-by-step central offices. Two others were a solid state key to dial pulse converter and a solid state toll diversion system which were marketed by C. P. Clare to telephone companies and to so-called interconnect companies who resold them to customers of the telephone companies.

From January 1968 to August 1970 I was a System Engineer for telephone systems for C. P. Clare & Company. During this period I was involved in the design of auxiliary telephone systems, including common control systems and toll ticketing equipment for use in telephone company central offices.

From January 1966 to January 1968 I was employed as an engineer with the Western Electric Company in Chicago, Illinois. I was responsible for applications engineering of Bell System toll and dial central office equipment. From January 1962 to January 1966 I worked as a group engineer with the Design Service Company, Chicago, Illinois, which was a contractor to the Western Electric Company. My duties there were the same as my duties with the Western Electric Company.

From April 1961 to January 1962 I was employed as an engineer with the Automatic Electric Company, North Lake, Illinois, the equipment manufacturer for the General Telephone Company. In this job I was responsible for applications engineering of Automatic Electric Company central office step-by-step equipment.

Question. Could you summarize the kind of experience and knowledge relating to the interconnection of station and peripheral telephone equipment with the public telephone network which these employments provided?

Answer. My employment with these companies required that I familiarize myself with the operation and design requirements of equipment presently installed in telephone company central offices. Furthermore, during these employments I was engaged in the design, development, manufacturing and installation of telephone station equipment—including PBX and key telephone systems—and associated peripheral equipment. This included the design and supervision of construction of station equipment arranged for direct connection to the telephone network.

Question. What is your educational background?

Answer. I was graduated from Illinois Institute of Technology with a Bachelor of Science degree in Industrial Engineering.

Question. Based on your experience and knowledge relating to the design and operation of telephone company central offices and the telephone network, and your experience and knowledge relating to the design and operation of the telephone station equipment and associated peripheral devices installed by Litton BTS and other interconnect companies, is the station and peripheral equipment compatible with direct connection to the public telephone network?

Answer. Yes. The equipment installed by Litton BTS is of the same type of design used by the Bell System, including Pacific Telephone & Telegraph Co. The PABX equipment installed by Litton BTS is purchased from OKI Electronics of America, Inc. and from Nippon Electric Company, Inc. (NEC). This equipment utilizes components, particularly wire spring relays and crossbar switches, which are made under license from Western Electric and are thus made to Western Electric specifications. The same models of PBX equipment manufactured by these companies are presently, and have been for a number of years, installed by operating companies of the Bell and General Telephone systems, and by independent telephone companies in the United States, and in these installations this equipment is, and has been, directly connected to the telephone network without interface devices. Among the operating companies installing this equipment are: Pacific Telephone and Telegraph Company installs the NA4-09 PBX manufactured by NEC; General Telephone of California installs the NG4-03—a somewhat larger PBX than the NA4-09 but utilizing the same basic design and components—also manufactured by NEC; Rochester Telephone Company and Mid Continent Telephone Company—2 independent telephone companies—install the AC120 type of PBX manufactured by OKI. In fact, we are informed that over half of NEC's total sales of PBX equipment in the United States is to telephone companies and that New York Telephone and Southern New England Telephone—both Bell System affiliates—are among NEC's largest purchasers of PBX equipment of the same type installed by Litton BTS and other interconnect companies.

Question. Does the same situation hold true with respect to the key telephone equipment installed by Litton BTS?

Answer. Yes. Litton BTS—as well as other interconnect companies—sells and installs key equipment commonly referred to as the 1A2 type. The 1A2 type is a designation used by Western Electric to denote a particular design. In other words, the key equipment installed by Litton BTS—and other interconnect companies—of the 1A2 Type is of the same design as used by Western Electric. The key equipment installed by Litton BTS is manufactured by ITT, Northern Electric, Stromberg Carlson and the Automatic Electric Division of General Telephone Company. This equipment is manufactured under license from Western Electric and conforms to Western Electric designs. This is true as to both circuit design of the equipment and component design used in the equipment. Equipment of the same type that Litton BTS purchases from these companies is also purchased by operating companies of the General telephone system and independent telephone companies throughout the United States and is directly connected to the public telephone network without any interface devices.

Question. What is the situation with respect to the compatibility of the Litton BTS key equipment referred to as LITKEY® for direct connection to the public telephone network?

Answer. Litton BTS's LITKEY® equipment is manufactured for Litton BTS by TIE/Communications, Inc. The LITKEY® telephone system contains more features than that commonly provided by the key equipment available from the telephone operating companies; however, the addition of the features does not affect the ability of the LITKEY® telephone system to connect directly to the telephone network. The relays used in the LITKEY® telephone system which perform the switching functions, are Western Electric MB type and are manufactured under license from Western Electric; and the basic LITKEY® telephone system is the same as that sold by TIE to independent telephone companies in the United States and is connected by them directly to the public telephone system without any interface devices.

Question. Is there a need for interface devices between Litton BTS' station equipment and the public network to protect the network from harm caused by direct connection of the equipment?

Answer. No.

Question. Would you explain?

Answer. In the first place, as I have just testified, telephone operating companies of the Bell and General Telephone Systems, and independent telephone companies, for a number of years have been, and are today, connecting equipment of the same type as that sold by Litton BTS and other interconnect companies to the public network without interface devices and, obviously, without harm.

As to the possibility of introducing extraneous power or power surges into the telephone network, which is a possibility often alleged by the telephone companies, the power equipment—that is, the rectifiers, ringing supplies, etc.—used in our equipment operates on the same 120 volt commercial AC power line used by telephone companies to power their station equipment. In all of this equipment—the telephone company's and Litton BTS'—the 120 volt AC input is rectified and converted to direct current, or is stepped down to a lower voltage alternating current, which is used to power the equipment. Thus, the potential for applying higher than normal voltages to the telephone network by virtue of this equipment is extremely remote and in any event is the same with respect to the telephone companies' equipment as it is with Litton BTS' equipment.

Question. How does Litton BTS' equipment compare with the telephone company equipment with respect to the possibility of generating improper dial pulses and signal levels?

Answer. Improper dial pulses are caused by improperly adjusted or worn rotary dial equipment, and these problems have the same likelihood of occurring with telephone company equipment as with Litton BTS' or anybody else's equipment. With respect to touch tone signals, the tone pad, which contains the oscillators, used in Litton BTS' equipment are made to the same standards used by the Bell System and are manufactured under license from Western Electric. Thus, the potential for frequency error is no different from the poten-

tial with respect to the telephone company's own equipment. With regard to signal level, Litton BTS' installations do not normally have amplification equipment, thus if Litton's equipment were directly connected to the telephone network, the likelihood of higher than normal signal level would be extremely remote. In fact, in the case of Litton's key equipment, a higher than normal signal level would be impossible because in direct connection to the telephone network the power for transmission would be obtained from the telephone company's line.

Question. Do the interface devices installed by the telephone companies cause problems?

Answer. Yes.

Question. Would you explain?

Answer. One of the most often cited problems caused by the telephone company interface devices is the reduction in transmission level. The insertion of the interface device between the telephone company lines and the customer's equipment inherently introduces some transmission loss. However, an additional loss is caused by the arbitrary and overly complex design of the most common interface devices supplied by Pacific Telephone and General Telephone (that is, the CDH, C2ACP, and others). To explain, the circuit from the telephone companies' central offices consists of two wires. These two wires carry the voice transmission and tone signalling; service request, answer/disconnect, and DC pulsing; and incoming ringing (105 volts, 20 Hertz alternating currents) functions. The most commonly supplied interface devices, however, convert the two-wire circuit to basically a six-wire circuit. But the six-wire circuit performs only the same functions originally performed by the incoming two-wire circuit. Since Litton's telephone station equipment—like the telephone companies' own corresponding equipment—is not arranged to work on six wires, the six-wires output of the interface devices must be converted back to two wires. This requires the installation of additional equipment on the customers' premises which causes further loss of signal level. Thus, the unnecessary and overly complicated design of the interface devices further impairs transmission level and creates additional potential for service problems. Obviously, this additional and unnecessary service and maintenance problem is unfavorable from the standpoint of the customer as well as the telephone company and the interconnect company—like Litton BTS—for it is not difficult to envision the problem of determining where a particular trouble lies—in the telephone company's equipment or in the customer's equipment. Whenever this trouble occurs, and it does all too often, the customer, the telephone company and the interconnect company all suffer while the trouble is being located and repaired. Troubles such as this, caused by unnecessary interface equipment, are certainly not in the public interest.

Question. Do the interface devices cause any other problems?

Answer. Yes. There is a problem of coordination between the interconnect companies and the telephone companies with respect to installing the interface devices properly and on time, in order to provide trouble free service connection for the customer. The specific problems are that the interface devices, on occasion, are not installed by the telephone companies in time for the customer's scheduled in-service date. In other cases, interface devices are installed on time but do not work due to improper installation or simply faulty devices. To alleviate the latter problem, Litton's own installation personnel frequently have had to install the telephone company's own interface devices or have had to reinstall the devices where they have been improperly installed in the first place by telephone company personnel. On other occasions, Litton's installers have had to locate the problem in faulty interface devices and to assist telephone company personnel in making the necessary repairs, or in some cases have had to make the necessary repairs themselves.

Question. How serious are the problems created by the telephone companies' interface devices?

Answer. So serious that in a number of instances the telephone company has not been able to correct the problem in their interface devices and we have hard-wired our equipment directly to the telephone network around the interface device with the tacit approval of the local telephone company personnel. Usually these instances of hard-wiring have been of only a few months' duration, but in some instances, our equipment has remained hard-wired for considerably longer periods.

Question. Has any instance of harm been found in any of Litton BTS' hard-wired installations?

Answer. Not to my knowledge.

Question. Do these operational problems of the interface devices cause trouble for customers?

Answer. Yes, but not only for the customers but for the telephone company and for Litton BTS as well. For one thing, the customer is inconvenienced by telephone company service personnel and our own service personnel coming and going on his premises. In addition, the mere fact that additional problems occur because of the unnecessary and overly complex design of the interface devices causes additional expense for the telephone company, ourselves, and occasionally for the customer. Sometimes, many service calls are required by both telephone company personnel and ourselves to locate and correct the trouble. Occasionally, also, the customer is charged for service calls due to erroneous or incorrect assessment of whose equipment—the telephone company's or the customer's—is at fault.

Question. What in your experience has been the effect of the interface devices on the ability of Litton BTS to compete with Pacific Telephone and General Telephone in the telephone station equipment market?

Answer. Because the monthly rates for these devices are high, especially in the General Telephone Company areas, the requirement of the interface devices tends to eliminate competition. In many sizes of installations they completely eliminate competition. Secondly, by introducing complexity to what is simply a two-wire circuit they increase the service and maintenance costs to customer-owned systems. This results in a further elimination of competition. Since Litton BTS and other interconnect companies are not assured a profit at the end of the year, the requirement of these devices seriously affects our business.

Question. Based on your training as an engineer and your experience in the telephone industry, if the devices were eliminated, what would be the effect on the telephone network?

Answer. Based on the equipment that we at Litton BTS install, and the procedures that we use in our installation and maintenance, elimination of interface devices would have no harmful effect on the public telephone network. As I have explained in my testimony, our equipment is made to standards, specifications, and designs that are fully compatible with the design requirements of the public telephone network and if directly connected would have no more potential for causing harm than the similar equipment installed by the telephone companies. Further, our equipment is installed and maintained by trained and qualified personnel, many of whom are experienced former telephone company personnel.

Question. Have you studied the proposed general order relating to rules for the connection of customer-provided equipment filed by the staff of the commission in this case on May 17, 1974?

Answer. Yes.

Question. Based on your experience with, and knowledge of, the telephone network, is this an optimum proposal?

Answer. Not in my opinion.

Question. Why not?

Answer. The staff proposal contains a good compilation of the operational and design parameters of the public telephone network which station equipment must meet in order to work properly when connected to the network. However, there are several critical omissions and excesses in the proposal. In the first place there is no provision for the proposed rules induced noise or cross-talk, incorrect dial pulsing, failure of supervision, false answer, incorrect billing, absence of voice band transmission path for call progress signals, and loss of capability to answer an incoming call."

Question. What is wrong with this definition?

Answer. It is incorrect to include induced noise or cross-talk because these cause neither injury to personnel, damage to the telephone network, or even a tie-up of central office equipment. It is incorrect to classify "hazards to personnel" as "harm" since a hazard is only a potential harm, not actual harm. Further, the reference to failure of supervision is not clear as to whether it refers to supervision over employees or supervision in the technical sense

which means on- and off-hook indication. Also, the inclusion of impairment of service to persons other than the user is overly broad and indefinite in that it could include any kind of occurrence that ties up central office equipment, even though only temporarily.

Question. What is wrong with including these occurrences in the definition of harm?

Answer. In my experience, harm to the network does not include incorrect dial pulsing, failure of supervision in the sense of failure to indicate on- or off-hook condition, false answer, absence of voice band transmission path for call progress signals, or loss of capability to answer an incoming call, all of which are included in the staff's proposed rules. The reason why, in my experience, these occurrences do not constitute harm is that they do not cause physical or electrical damage to the network or harm to personnel; they only cause a temporary tie-up of small portions of central office equipment. In practice, these conditions, at most, cause only temporary inconvenience to the customer until they are corrected by a service call, and their effect on the network by tying up central office equipment is not substantial. Furthermore, these conditions occur—and have since the beginning of the telephone system—whenever station equipment becomes worn or out of adjustment. This can happen with telephone company-supplied equipment as well as with customer-owned and maintained equipment.

Question. In your experience with the telephone network, what is the correct definition of harm?

Answer. In my experience, harm to the network encompasses only actual harm or injury to telephone personnel or actual physical or electrical damage to the network which must be repaired.

Question. In your experience, is the method of certification provided in the proposed rules an optimum proposal?

Answer. No.

Question. Why not?

Answer. In my experience, the method of certification proposed in the rules which requires licensed professional engineers to certify each piece of equipment is unnecessary, and would create excessive costs.

Question. Why is that so?

Answer. In the first place, it is unnecessary to have the Public Utilities Commission specify the operational parameters of the public telephone network which station equipment must meet in order to qualify for direct connection to the network. The design and performance standards of the telephone network have never been secret. They have been published a number of times over the years and are readily available. For example, the Rural Electrification Administration (REA) has published a set of standards for all types of telephone equipment directly connected with the telephone network. Staff witness Bevc admitted in his testimony (pages 14-17) that his proposed rules were taken from existing sources of such information.

Secondly, it is not necessary to require that station equipment be certified by a licensed professional engineer as meeting the operational parameters of the public network. Obviously, if station equipment does not meet the operational requirements of the telephone network, it will not serve the customer properly and will have no market. Therefore, any manufacturer desiring to manufacture station equipment for connection to the telephone network simply must design and manufacture that equipment so it will work properly with transmission, or loss of capability to answer calls, would result in failure of the customer's equipment to operate properly, resulting in a customer complaint and a service call to repair the problem. Thus, problems of this nature are self-correcting in a competitive market, because if certain makes of equipment do not operate satisfactorily for the customer, that equipment will not sell; or if the customer is dissatisfied with the maintenance of his equipment, he will go to another company for service. In short, the normal interplay of competition would mean that the equipment and service which was satisfactory to the customer would survive in the market and equipment and service which was unsatisfactory would not. In addition, if trouble of a type causing actual harm consisting of hazards to personnel or serious degradation of service by the network persisted, the protection of disconnection proposed in section 3.6 of the proposed rules would apply.

Thank you Mr. Fitzpatrick.

EXHIBIT 6.—*Position Statement of Litton Systems Before California Public Utilities Commission Interface Investigation*

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Case No. 9625 (Filed October 24, 1973)

Investigation on the Commission's own motion into the promulgation of a General Order providing for the procedures and standards to be followed for the interconnection of customer-provided communications terminal equipment to the telecommunications facilities of intrastate telephone utilities.

STATEMENT OF POSITION OF LITTON BUSINESS TELEPHONE SYSTEMS DIVISION OF LITTON SYSTEMS, INC., ACCOMPANYING PREPARED TESTIMONY OF FRANK E. FITZPATRICK REGARDING RELEVANCE OF CERTAIN ISSUES TO COMMISSION'S INVESTIGATION

1. Unlike PT&T, whose prepared testimony goes only to the issue of economic harm, Litton BTS is not submitting testimony on this issue for the reason that the issue of economic harm is irrelevant to this proceeding.

The issue of economic harm can involve only two questions: (1) whether interconnection is to be completely prohibited, or (2) if interconnection is to be allowed, whether the existing tariff structure is to be changed so as to recompense the telephone companies for any revenues lost to interconnect competition.

The issue of allowing or prohibiting the interconnect of customer-owned and maintained telephone terminal equipment is obviously not before this Commission because that issue has been preempted by the Federal Communications Commission and has been decisively decided in favor of interconnection. This was reaffirmed just recently by the FCC in *Telerent Leasing Corp. et al.*, Docket No. 19808, FCC 74-109 (39 Fed. Reg. 4942, February 8, 1974). In this ruling, the FCC declared that it has paramount and controlling authority to regulate interconnection of subscriber-furnished equipment to the public telephone network. The FCC also held that any restriction on the freedom of telephone customers to obtain their own systems from either the telephone company or non-telephone company sources and to interconnect such systems with the telephone network, subject only to reasonable requirements to prevent harm to the network, is in conflict with Federal policy. Thus, the California Public Utilities Commission has no authority over allowing or prohibiting the interconnection of customer-owned and maintained equipment except when such equipment causes actual harm to the network.

Since the PUC cannot completely prohibit interconnection of customer-owned equipment, all this commission can do with respect to economic harm is to adjust telephone rate structures in the State of California to make up for any revenues lost by the telephone companies due to loss of telephone terminal equipment business to interconnect competitors. Clearly, the question of whether such rate adjustments are in the public interest,¹ and how any necessary rate adjustment will be made, is an issue that is outside the realm of this proceeding.

2. Litton BTS submits the attached prepared testimony of Frank E. Fitzpatrick on the issue of technical harm to the public telephone network from customer-provided and maintained equipment only at the request of the Commission and of the Hearing Examiner in this case.

The submission of this testimony is not an admission by Litton BTS that it, or any interconnect company, has the burden of proving that the present interface requirements are unnecessary or unlawful. To the contrary, the California Supreme Court in its recent decision in *Phonetele v. P.U.C.*, 11 Cal.

¹ In view of the evidence before this Commission showing the degree to which PT&T loses money on their telephone terminal equipment business—see Opening Brief of Litton BTS, dated February 1, 1974, in the PT&T general rate increase proceeding (Application Numbers 53587 and 51774; Case Numbers 9504, 9503)—it is seriously questionable whether it is in the public interest to allow the telephone companies to stay in this business at such substantial expense to the general ratepayers in the form of subsidies to support the business.

3rd 125 (April 8, 1974) has clearly held that the *telephone utility* has the burden of proving that the interface devices are necessary and lawful.² Moreover, in the *Phonetele* decision, the Supreme Court held that a protective device may be required "only if" it is shown that the instrument in question will have a substantial actual or probable adverse effect on the telephone network as a whole. Thus, the Supreme Court held that the telephone utilities must show that interface devices are necessary to prevent substantial actual or probable harm *before* they can require or charge for such devices. 11 Cal. 3rd at 129-130.

3. The standards established by the California Supreme Court in the *Phonetele* case, combined with the fact that all telephone terminal equipment—telephone company-supplied as well as customer-owned and maintained—has the same potential for causing harm to the telephone network (see attached testimony of Frank E. Fitzpatrick), require that any certification program adopted by the Commission must apply equally to the equipment supplied by telephone utilities as well as to equipment supplied by interconnect companies.

The Supreme Court in *Phonetele* held that the Commission may adopt standards to prevent harm to the network from customer-owned equipment, but also held that where a ruling in favor of the utilities would result in a potential threat to free competition, the Commission "must be particularly solicitous" to assure that its determination is "warranted by the need to safeguard the telephone network as a whole." 11 Cal. 3rd at 132. It follows, therefore, that this Commission cannot apply to customer-provided equipment a certification program which imposes a substantial burden of compliance unless the program is imposed on all equipment that has the same potential for causing harm to the network "as a whole." Anything short of applying the program to equipment supplied by utilities which has the same potential for causing harm to the network would be discriminatory and unlawful.

In this regard, it should be noted that the arbitrary imposing, or withholding, of industry testing or certification programs with the effect of restraining or eliminating competition is a recognized anticompetitive practice. See *Radiant Burners, Inc. v. Peoples Gas Light & Coke Co.*, 364 U.S. 656 (1965); *Associated Press v. United States*, 326 U.S. 1 (1945); *Structural Laminates, Inc. v. Douglas Fir Plywood Assn.*, 261 F. Supp. 154 (D. Ore. 1966); *United States v. Johns-Manville Corp.*, 259 F. Supp. 440 (E.D. Pa. 1967). The California Supreme Court has held that this Commission must consider anticompetitive effects in carrying out its responsibility to act in the public interest. *Northern California Power Agency v. Public Utilities Commission*, 5 Cal. 3rd 370, 379 (1971); *Phonetele*, *supra*, at 11.

Respectfully submitted.

THEODORE F. CRAVER,
LARRY L. YETTER
KELLEY V. REA

Attorneys for Business Telephone Systems Division of Litton Systems, Inc.

EXHIBIT 7.—*New York Public Service Commission Staff Report on Rochester Telephone Corp. Interconnect Device*

STATE OF NEW YORK PUBLIC SERVICE COMMISSION

JUNE 3, 1974.

TO: The Commission
FROM: Communications Division
SUBJECT: Report on Rochester Telephone Corporation's Interconnect Offering
(Case 26064)

This memorandum is presented for the information of the Commission. No action is required.

Opinion No. 71-18 in Case 26064, dated August 21, 1972, required Rochester Telephone Corporation (RTC) to submit a quarterly report on the operation

² The Supreme Court stated: "... since damage to the telephone system has not been demonstrated, telephone subscribers who choose to use the Phonemaster should be permitted to do so without incurring additional charges for connecting devices." 11 Cal. 3rd at 132.

and results of the company's interconnection tariff which became effective on February 6, 1973. This memorandum provides a review of the operation and results for the first full year plus two months of the company's offering.

DISCUSSION

Attached as an Appendix are RTC's most recent quarterly report for the quarter ending March 31, 1974, and charts summarizing pertinent data in the reports. Chart #1 shows the growth of interconnected lines with a division for lines equipped with NPD's and a division for lines equipped with Bell-type connecting arrangements. It is apparent that the preponderance of customers desiring to connect their own equipment to the network choose the NPD method as opposed to Bell-type connecting arrangements. It also appears that after the first eight months of the interconnect offering the growth rate of interconnect lines is settling down to approximately eight (8) percent per quarter. The single largest increase in interconnected lines occurred in June, 1973, when the Eastman Kodak Company negotiated the purchase on-premises telephone equipment as approved by this Commission in separate Case 26424. The 969 lines with interconnected equipment are relatively insignificant (0.34%) when compared to the total 289,500 lines served by the Rochester Company. In fact, if the eight percent growth rate persists it will be more than five years hence before one percent of the RTC lines have interconnected equipment. It is also interesting to note that, with the exception of automatic answering devices (offered under a separate tariff provision), only five residence lines have customer-provided equipment.

Conclusions on investment, expense, and economic impact factors are difficult to compile at this early stage of experience. The Division is planning to conduct an economic impact study in this area after more data is available.

The qualitative measures of service show no detrimental impact on the overall service provided by RTC. Customer trouble reports are the prime measurement in this area. In order to provide comparative measurements, and because RTC does not have a station count on interconnected lines, Chart #2 presents trouble reports per 100 lines rather than the conventional reports per stations. One division shows total company reports adjusted to remove station troubles, thus making it more closely comparable to the division showing reports on interconnect lines. This comparison shows that customer trouble reports to RTC are lower on lines with interconnected equipment than on lines with RTC-provided terminal equipment. Further, as an overall indicator, the total company customer trouble reports per 100 stations since October 1973, has improved upon the objectives stated in the Commission Service Standards in five of the six months reported (i.e. average 4.0).

The company stated at the NARUC Communications Committee investigation that "no specific cases of improper signal levels, hazardous voltages or improper line voltages have been detected to date by RTC" and that the company is aware of "no instance where a privately-owned system has failed."

CONCLUSION

The RTC interconnect offering, when reviewed using available indicators, appears to be acceptable thusfar to RTC, to its customers, and to the other parties involved. However, data is fragmentary and cannot be viewed as conclusive. The only complaints received by the Division in this matter have been to request implementation of the RTC method in other telephone companies. We do not believe that sufficient experience has been gathered to require other companies to use the RTC method.

The Communications Division will, of course, continue to monitor the offering and report our conclusions and recommendations to the Commission.

Respectfully submitted.

ROGER L. SUTLIFF,
Chief System Planner.

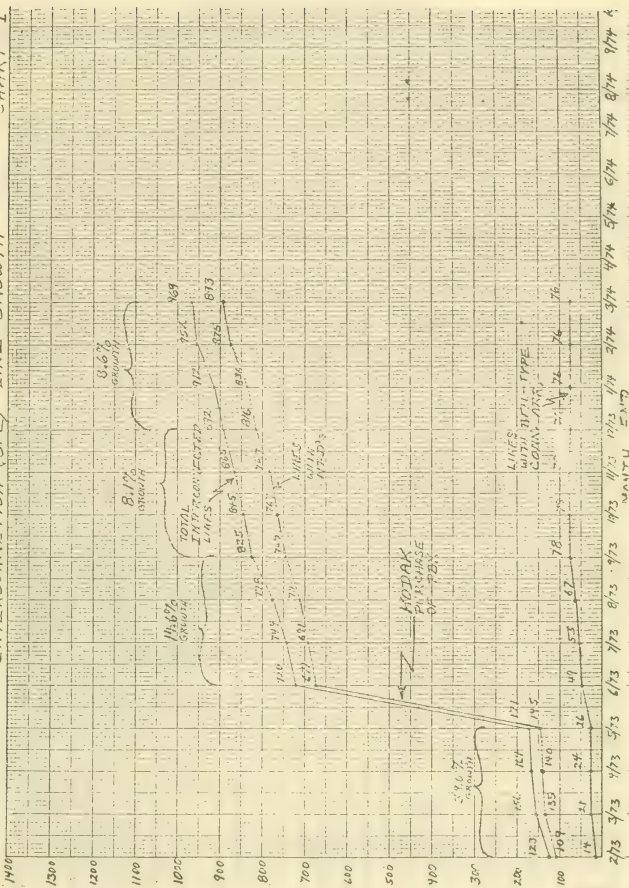
Approved.

NEIL A. SWIFT,
Director of Communications Division.

Attachment:

INTERCONNECTED
LINESROCHESTER TELEPHONE CORP.
INTERCONNECTION (CPE) LINE GROWTH

CHART I

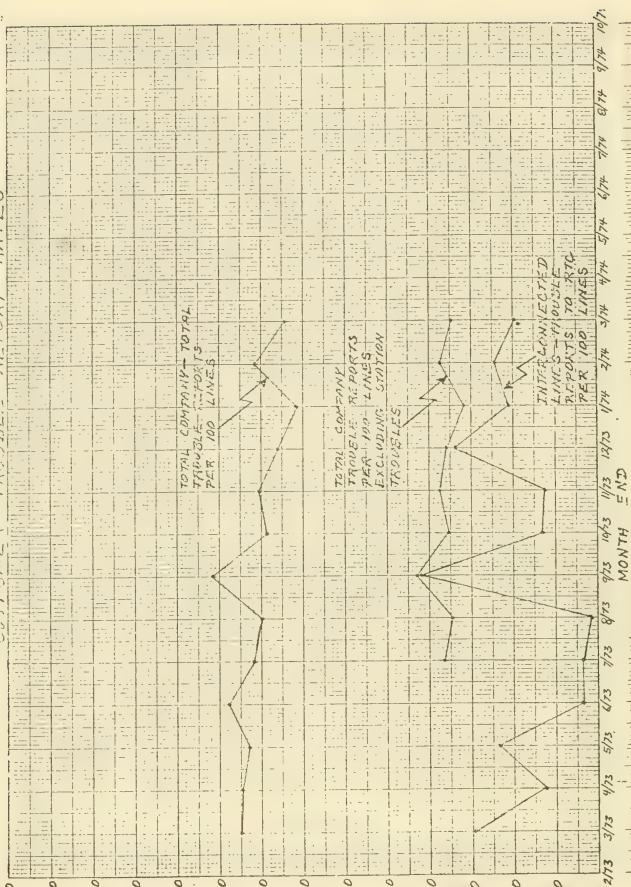


REPORTS
PER 100

ROCHESTER TELEPHONE CORP. CUSTOMER TRAVEL REPORT RATES

CHART 2

3802



Continued on next page

See back of report for details

ROCHESTER TELEPHONE CORP.

Quarterly Interconnection Report Number

[Quarterly report dealing with operation and results of Interconnect tariff filing effective February 6, 1973; submitted in accordance with the Commission's Order in Case 26064]

	January 1974	February 1974	March 1974	Cumulative totals through March 31, 1974
QUANTITATIVE MEASURES				
A. Number of lines interconnected:				
1. N.P.D.—main (access) line—				
a. Business:				
(1) Voice—switching systems	0	22	2	484
(2) Voice—station equipment only	18	18	13	163
(3) Data	1			33
b. Residence	1			1
2. N.P.D.—Extension—				
a. Business:				
(1) Voice				71
(2) Data			2	3
b. Residence				4
3. Leased Channels for voice (2 NPD's required)				134
4. N.P.D.—total in service	836	875	893	893
5. Bell type interface—				
a. Business:				
(1) Voice—switching systems				14
(2) Voice—station equipment only				0
(3) Data				62
b. Residence				0
6. Bell type—Total in Service	76	76	76	76
7. Total lines with interconnected service	912	952	969	969
B. Investment:				
1. Equipment in service—				
a. N.P.D.	\$309	\$2,043	\$1,935	\$65,799
b. Bell type interface	\$876	\$641	\$1,635	\$20,944
2. Equipment inventory or held for future use:				
a. N.P.D.	\$11,418	\$12,591	\$11,838	
b. Bell type interface	\$2,408	\$3,494	\$2,355	
C. Expense:				
1. Certification expense—				
a. Switching systems		\$172		\$1,586
b. Station equipment	\$188	\$57	\$28	\$937
2. Inspection expense—				
a. Initial installation inspection:				
(1) Switching systems		\$87		\$1,820
(2) Station equipment	\$126	\$54	\$9	\$845
b. Periodic inspections		\$113	\$8	\$580
3. Test desk expense on interconnected lines—				
a. Telco troubles	\$45	\$20	\$15	\$120
b. COAME troubles	\$10	\$15	\$15	\$183
c. Undetermined troubles	\$20	\$35	\$35	\$140
4. Repair expense (dispatched) on interconn. lines—				
a. Telco troubles	\$136	\$310	\$105	\$1,189
b. COAME troubles	\$44	\$105		\$825
c. Undetermined troubles	\$160	\$100	\$32	\$568
D. Certification:				
1. Technical reviews—				
a. Quantity and man-hours of technical reviews:				
(1) Switching systems		11/7.50		110/69.50
(2) Station equipment	15/3.75	112/6.50	11/0.50	136/39.25
b. Charges made to customers:				
(1) Switching systems		\$172		\$1,527
(2) Station equipment	\$91	\$137	\$13	\$577
2. Initial inspections for certification—				
a. Quantity and man-hours of initial inspections:				
(1) Switching systems		11/5.00		115/91.75
(2) Station equipment	15/7.00	111/6.25	11/0.50	137/51.05
b. Charges made to customers:				
(1) Switching systems		\$87		\$1,784
(2) Station equipment	\$69	\$84	\$5	\$672
E. Periodic Inspection:				
1. Quantity of periodic inspections—				
a. Business		4	1	35
b. Residence				0
2. Incidence of trouble or non-compliance found—				
a. Business			1	1
b. Residence				0

See footnotes at end of table, p. 3805.

ROCHESTER TELEPHONE CORP.—Continued
Quarterly Interconnection Report Number—Continued

	January 1974	February 1974	March 1974	Cumulative totals through March 31, 1974
QUANTITATIVE MEASURES—Continued				
F. Maintenance of Service Charges:				
1. Testboard charges—quantity of occurrences and dollars billed—				
a. Business (NPD).....				0
(1) Main (access) line.....		23/\$92	1/\$4	51/\$198
(2) Extension (mixed).....				1/\$4
b. Residence (NPD).....				0
(1) Main (access) line.....				0
(2) Extension (mixed).....				0
2. Dispatch charges—quantity of occurrences and dollars billed—				
a. Business (NPD).....				31/\$448
(1) Switching systems.....	2/\$41	1/\$10		0
(2) Station equipment.....				3/\$48
b. Business (Bell type interface).....				0
c. Residence (NPD).....				0
d. Residence (Bell type interface).....				0
G. Illegal Connections:				
1. Number of services suspended for non-compliance with tariff.....				0
2. Number of cases of decertification due to non-compliance with standards.....				0
H. Investment data—equipment removed from service:				
1. Account 231—				
a. Original cost.....	\$13,678	\$2,683	\$1,305	\$1,399,655
b. Depreciation reserve requirement.....	\$3,414	\$1,082	\$548	\$411,010
c. Salvage:				
(1) Reused.....	\$13,678	\$1,227	\$1,305	\$110,242
(2) Sale to customer.....				\$698,053
(3) Junked.....		\$12		\$96
d. Cost of removal.....	\$292	\$44		\$809
2. Account 232—				
a. Original cost.....	\$3,461	\$4,499	\$1,516	\$1,654,981
b. Depreciation reserve requirement.....	\$122	\$20		\$11,098
c. Salvage:				
(1) Reused.....				0
(2) Sale to customer.....				\$1,275,019
(3) Junked.....				0
d. Cost of removal.....	\$1,175	\$829	\$303	\$33,563
3. Account 234—				
a. Original cost.....				\$63,478
b. Depreciation reserve requirement.....				\$12,418
c. Salvage:				
(1) Reused.....				\$19,409
(2) Sale to customer.....				0
(3) Junked.....				\$4
d. Cost of removal.....				\$1,633
4. Account 242—				
a. Original cost.....				\$19,010
b. Depreciation reserve requirement.....				\$5,248
c. Salvage:				
(1) Reused.....				0
(2) Sale to customer.....				\$1,467
(3) Junked.....				0
d. Cost of removal.....				\$4,680
I. Revenue loss—equipment removed from service.....	\$269	\$188		\$777,612
J. Number of stations removed from service.....	20	72		15,671
QUALITATIVE MEASURES				
A. Customer Reports per hundred lines COAME vs. reports per hundred lines Telco equipment:				
1. Including Telco station troubles.....	2. 08/7. 15	2. 42/8. 14	1. 96/7. 42	21. 75/8. 09
2. Excluding Telco station troubles.....	2. 08/3. 15	2. 42/3. 71	1. 96/3. 46	21. 75/3. 60
B. Interconnected service:				
1. Total trouble reports.....	19	23	19	157
2. Trouble in Telco facility or equipment.....	9	8	6	59
3. Trouble in COAME.....	2	5	3	44
4. Tested or found OK.....	8	10	10	54
C. Use of remote test feature (NPD)—number of reports where use of remote test feature:				
1. Isolated trouble to COAME.....	0	6	3	27
2. Isolated trouble to Telco facility or equipment.....	0	1	1	14
3. Could not determine trouble location (including test OK).....	19	16	10	69

See footnotes at end of table, p. 3805.

ROCHESTER TELEPHONE CORP.—Continued
Quarterly Interconnection Report Number—Continued

	January 1974	February 1974	March 1974	Cumulative totals through March 31, 1974
QUALITATIVE MEASURE—Continued				
D. N.P.D. failures:				
1. Number of occasions where NPD was source of trouble requiring—				
a. Replacement of components in NPD.....	0	0	1	5
b. Complete replacement of NPD.....	0	0	0	0
2. Total hours lines out of service as a result of NPD failures.....	0	0	³ 3.75	² 9.25
E. Bell type interface failures:				
1. Number of occasions where interface was source of trouble requiring—				
a. replacement of components.....	0	0	0	0
b. complete replacement of device.....	0	0	0	0
2. Total hours lines out of service as a result of interface failures.....	0	0	0	0

¹ Man-hours.² Average reports, 12 months thru Mar. 31, 1974.³ Hours.

AFTERNOON SESSION

Senator HART. The committee will be in order.

The next witness is Cyrus J. Colter, former commissioner, Illinois Commerce Commission.

Mr. Colter, your statement will be received for the record. You may proceed.

**STATEMENT OF CYRUS J. COLTER, FORMER COMMISSIONER,
ILLINOIS COMMERCE COMMISSION**

Mr. COLTER. Thank you very much.

[Mr. Colter's prepared statement appears as exhibit 1 at the end of his oral testimony.]

Mr. COLTER. First of all, I want to refer to a matter raised this morning by one of the reporters during one of the breaks. He asked me how I came to be here, if A.T. & T. went to me and asked me to prepare some testimony, come down here, and testify.

I am here on my own initiative. I read about this proceeding; and as a faculty member of Northwestern University, I had occasion on a university matter to talk with one of the trustees, who happens to be a partner in Sidley & Austin which represents A.T. & T. I asked him what is going on down there. This is a very disturbing thing to all of us who have been in regulations.

I was fortified in this when I heard Mr. Craver speak this morning about the attitude of Chairman Ben Wiggins of Georgia, whom I know very well. I can understand how he was upset. I can hear him say what Mr. Craver said that he said about the difficulties he sees in this proposal at it relates to the capacity of the State regulator to deal with the practical problems that he faces in dealing with rate cases in this State jurisdiction.

So I wrote this testimony that will be in the record, wrote every word of it. It is my statement.

I want to take just a few moments to describe for the record what a State commissioner goes through in dealing with the rate case. You all know that the first task the commission has is to determine the earnings requirement of the company before it; and that tends to be a rather inelastic procedure, because the statutes furnish guidance on that as construed by the courts; but when that determination has been made, that is only one part of the problem, maybe not the major part, because once the number of dollars which the company must be given in addition to the gross revenues it is at that time experiencing, deriving from its operation, it has got the very important function of determining where those dollars are going to be spread, from what classes and categories of customers will the commission require these dollars to be raised.

And that is a very real problem for all State commissions. Mr. Craver remarked at length this morning about the attitudes that he has seen on the part of some State commissions throughout the country about their disinclination, as it seemed to him, to disturb the present situation; and I gleaned—maybe Mr. Craver will not go along with me on this—but I seem to get the reaction from his statement this morning that there could conceivably be some scienter, or some bad motives in these attitudes on the part of State commissions.

It is not at all. It is a very realistic problem they face. Under the present system, a State regulator wants to have some dollars to play with, to put it very crassly, when the time comes to spread these rates among the various categories of customers.

His presentation this morning did demonstrate some cleverness and acumen on his part. He chose a given segment of an operation; for instance, in this complex pricing picture there are many types of services that a company affords to its customers, both residents and business customers. It is perhaps astute on the part of someone urging his point of view to look over this whole picture and to select certain narrow categories of customers that may not be charging the customer what it requires on the part of the company to furnish this service; but I urge this committee, before this record is closed, to insist that this record show the complete cost of service required to give every category of service, and then make a determination as to whether or not this board vista, whether or not it can be said about this entire pricing picture, that netwise, that it is not paying its own way. I am talking now about the service that is nonresidential, because listening to Mr. Craver this morning it could easily have been deduced by this committee that the main point that State regulators are trying to get across to this committee is not true. What people who believe like me are trying to get the committee to see is that here is one inescapable result of his proposal; and I am not presuming to advise this committee on the overall public policy question that it deals with here, involved in S. 1167. I merely am trying to point out to the committee that there is one inescapable result from this proposal; and that is that the State bodies in dealing with the revenues and the revenues requirements of these companies are no longer going to be able to afford the "luxury" that they had

heretofore in trying to keep the rates down for the people who have one telephone, for the poor people, the blacks, the Latinos, the aged, the people on pensions who do not have any hedges against inflation.

Now, Mr. Craver spoke this morning about competition as if he regarded it in the same category with motherhood. We have got to be more definitive than that. Competition is good, and it is desirable in many phases; but there are some phases, if we are selective and definitive about it, in which competition can be antisocial.

For instance, Mr. Craver conceded this morning that it was his position that there ought to be total deregulation; no Federal regulation, no State regulation. That would leave the mechanistic forces of competition in charge of the whole picture.

It is my firm belief that this can operate in a most heartless way to the citizens of this country who are farthest down the economic ladder. They have no one to speak for them. Who is thinking about the poor American citizen who can barely make his way now when we have this great controversy between these giant corporations; A. T. & T. on the one hand and Litton Industries and all of these other big corporations?

It is my fear that the man in the street is going to get caught in the switches if someone does not make clear to the committee, which must resolve these basic problems, that not presuming to speak in a way that would dispose of the big issue—I repeat that—but to point out and urge on the committee that there is at least one area in which the pricing of telephone service to the residential customers is going to be in a very different posture than it is now in.

I could go into the question of quality of service. It is for those of you who have traveled over the world, when we think of the quality of telephone service that we have here—and I speak—anyone who knows my record in Illinois would not characterize me as a tool of the utilities. They certainly don't think that.

But I have no hesitancy at all in saying that we in this country have the best telephone service in the world.

Now if this proposal is adopted by the Congress we can be sure of one thing: That the Bell system is going to be in a very different situation than it is now.

Many people would say, well, preferably, we hope so; but we all must concede that it is going to be very different. There will be basic changes made.

All of us who are interested in this problem have got to try to assess what the nature of the changes are going to be and how the public interest will be affected, pro or con.

I am sure this committee is going to do that. I am sure it is not going to rush into something as important as this simply because the word "monopoly" has a bad connotation. There are good monopolies and bad monopolies. If someone were to ask me the question: "Are you in favor of A.T. & T. being permitted to go on with this terrific power that it has got?" and that sort of thing, I would say I am not competent to give an answer to that.

I am here trying to urge certain points of view on this committee within the very narrow role in which I have played in regulation.

Give me an opportunity to go over these notes I have scribbled here as I listened to Mr. Craver.

He speaks about the difficulties that these would-be competitors have when they go before the State commissions, and that there is evidence in the record that in so many cases the Bell companies furnish services to business customers which do not pay their own way.

I wish the committee could listen to some of the intervening business customers in some of the rate cases that are held before the State commissions. The business customers come in and complain bitterly that historically the commission has been unfair to them in burdening them with this distorted rate picture. There is much merit in what they say. The commission has the problem of making these judgments according to what it sees to be in the public interest; but nevertheless, the business customers come in and they fight those cases bitterly; and they complain that the commission is biased and that they are imposing rates on them that are burdensome, that are unfair and they exhort the commission—in the spreading of these rates—to not be so tough on the business customer.

Another factor that I think is important in this is that many, many times the Bell operating company itself complains that it does not want it to be made. Now we have heard testimony this morning to the effect that the commissions tend to be supine with the Bell operating companies, and that it is the Bell operating companies that have, for all intents and purposes, the last say on what the rate structure is going to be.

This, I want to make clear to the committee, is not the case. Many times the Bell operating companies themselves object to the proposals that the commission has in mind to place many of these required dollars on the shoulder of the business customers.

I will close by citing a case, the last Bell case that the Illinois Commerce Commission decided before I retired from the commission in 1973. It was a case in which Bell, I think, asked for some \$80 million in increased gross revenues. The commerce commission, after lengthy hearings, decided that Bell was entitled to a rate increase, instead of maybe \$85 million, \$44 million; but not one penny of that increase of \$44 million went to residential customers. For the service itself—and I am talking about the commodity charge—not one penny of that \$44 million increase went to household customers.

It all went to other categories of service. It seems to me that flies in the teeth of Mr. Craver's viewpoint here this morning that this is a terrible thing because the State commissions are so supine and so unable to deal with patent evil like that. It is not true.

So if the volume of business is taken away from A.T. & T., if other competition is permitted to enter into this field, the Illinois Commerce Commission would not have been able to do that. If it had decided that Illinois Bell was entitled to an increase of \$44 million it could not have let the household customers get away in that situation with no increase at all.

So that, in a very short period of time, is how this problem works. It is a very, very serious problem. I urge on the committee, when

it gets to the point where it must resolve the overall basic public policy question, that it merely keep what I have tried to urge here in mind: that it is a much more difficult question and that it is not nearly as simplistic as Mr. Craver would have you believe—that the absence of competition is bad: therefore, our only job is to examine the record to determine whether or not there is an absence of competition; and if we find that then we ought to extirpate it.

Thank you very much.

Mr. CHUMBRIS. Thank you very much.

Senator HART. Thank you for your attention.

The hearings will stand adjourned until 9:30 a.m., Tuesday, July 9.

[Whereupon, at 4:25 p.m., the hearing was adjourned, to reconvene at 9:30 a.m., on Tuesday, July 9, 1974, in room 2228, Dirksen Senate Office Building.]

[The following was received for the record. Testimony resumes on p. 3837.]

MATERIAL RELATING TO THE TESTIMONY OF CYRUS J. COLTER

EXHIBIT 1.—*Prepared Statement of Mr. Colter*

STATEMENT OF CYRUS J. COLTER, FORMER COMMISSIONER, ILLINOIS COMMERCE COMMISSION

Mr. Chairman and Members of the Committee: My name is Cyrus J. Colter. My address is 601 East 32nd Street, Chicago, Illinois. I appreciate the opportunity to appear before this honorable committee. I am here in the interest of consumers—or, as some prefer, the average telephone user, or “the man in the street”, or “the little guy.” I have had some experience in this area and what I’m going to say about such qualifications as I may have to be here may at first seem boasting but I hope the Committee will understand my motive is to demonstrate my long-time involvement with public utility customer protection, especially for the customer far down on the economic ladder.

I served four years in the military in World War II, attained the rank of Captain in the Field Artillery, and saw combat in Italy in the 5th Army under General Mark Clark. I am a lawyer by profession, and for a time, both before and after military service, practiced law in the black community in Chicago until 1950.

Last September, I became Professor of African-American Studies at Northwestern University, Evanston, Illinois. To accept this post, I resigned, effective July 31, 1973, as a commissioner on the Illinois Commerce Commission, the five-member state agency which regulates the public utility companies doing business in Illinois. Coming from Chicago’s black community, which now numbers almost 1½ million people, I was first appointed to the Commission in 1950 by the late Adlai E. Stevenson, then Governor of Illinois. I too am a Democrat. I have served under each Illinois governor, Democrat and Republican, since that time—six in all. At the time of my resignation, my service had spanned 23 years and 5 months, the longest tenure a commissioner has had on that 103-year-old body.

During my years on the Commission I carried out, in addition to my regular duties, a number of other governmental assignments, nonsalaried in nature. Mention of two here will suffice. In 1962 President Kennedy, by executive order, established the Administrative Conference of the United States, whose mission was to study the administrative agencies and executive departments of the federal government and render a report. I was appointed a member of this Conference, which regularly held its meetings, plenary and committee, here in Washington. The other assignment I shall mention came in 1963 when the Governor of Illinois appointed me to be Chairman of the Illinois Emergency Transport Board. The function of this board is to achieve and maintain a state of readiness in the transportation industry in Illinois in the event of a national emergency or nuclear attack.

Except Governor Stevenson, all of the governors in whose administrations I served are living. On my resignation from the Commission last year (I was serving my fifth 5-year term—which runs to 1976), each of these gentlemen communicated with me to commend me for my state service and wish me well in the academic world. The Attorney General of Illinois, a Republican, said in a letter to me: "For more than twenty-three years you have represented the eleven million citizens of Illinois by protecting their consumer interests against overindulgence by some of the largest economic interests in the world. A debt of gratitude is due you for an overwhelmingly distinguished record of service in the public interest."

The present governor, Daniel Walker, on accepting my resignation, presented me with a generous plaque, which read in part: "A Tribute to Cyrus J. Colter, Commissioner, Illinois Commerce Commission, from 1950 to 1973. For over two decades you have enriched the lives of the people of Illinois by your dedication to the highest principles of public service and trust. In appreciation therefor, and on behalf of all the people of Illinois, we gratefully present this tribute. (Signed) Dan Walker, Governor."

Both the House and the Senate of the Illinois General Assembly—at the behest of the black members of those bodies—passed unanimous resolutions commending me for what the Senate termed "energetic and faithful service to the public."

I thank the Chairman for his forbearance in allowing me to go into this detail and hope it hasn't struck the Committee as entirely self-serving. I have wanted to show that for many years I have been actively involved at the grass roots with some of the questions the Committee faces in its consideration of S. 1167. This is especially true, I believe, of the aspect of the inquiry involving the pricing of Bell telephone service at the state level. I've also wanted to reassure the Committee I have no axe to grind, no reproach to fear, no favor to curry, in appearing here. The statement I make here is mine. I prepared it. I wrote it. I feel privileged to make it because it assesses certain of the proposals before you which, directly or indirectly, affect the ability of state commissions to do the difficult job of pricing Bell service.

I appreciate the complexity of the phase of these hearings dealing with the Bell System. Because I've dealt with the issues only from one state's vantage ground, I would not dare presume to urge final solutions. My role will be limited to pointing out, based on my experience, the areas of concern I have about some of the proposals which have been presented to this Committee.

I have known many state regulators and have served with twenty-one of them on the Illinois Commerce Commission alone. Also, through meetings and committee work in the National Association of Regulatory Utility Commissioners (NARUC) over the years, I've had frequent contact, conversations, comparison of notes, with many more regulators across the country. Some of them, for whatever reasons, have been what may be called, for want of a more accurate expression, "anti-Bell." I stress *some* of them, and I would characterize their feelings as more suspicious in nature than hostile. This results from a fear that AT&T, in watching the dividend performances of its various operating companies, may seek to make up in the rate cases in the so-called "fair-treatment" jurisdictions earnings deficiencies caused by the "unfair" treatment it thinks it received in some of the other jurisdictions. Accordingly, these regulators are watchful of other state commissions and how they handle their Bell companies. In this way they try to protect their states from becoming dupes of other jurisdictions. I must say I consider myself to have been one of this group of regulators. Yet, I never thought of myself in any real sense as "anti-Bell"—though, by some of my votes and dissents, Illinois Bell Telephone Company officials may have on occasion so regarded me.

I say this to try to show that, regarding the Bell System, there was no clear consensus among state regulators. This is not to say, however, there are no areas of solid consensus. For instance, among generally all state regulators, from what they have learned from their regulatory experience, is the pervading and to them gratifying belief that (1) Bell System service is the best in the world, and has the highest degree of availability, and (2) that while over the years prices on almost all consumer items have greatly escalated, Bell System charges to its customers, especially its household customers, have lagged dramatically behind. The fact that both the Bell System and the regulatory

community take credit for this condition is of limited importance, for the solid fact is there.

I don't think it's unreasonable to say that most regulators want this salutary situation to continue—good service with wide availability, and reasonable rates. They believe, too, they know some of the reasons this condition prevails. They also think they know what could destroy it. The latter concerns them considerably.

How is Bell System's good service possible? There are of course so many, varied reasons that System people themselves couldn't isolate them all. Yet some of the major ones can rather clearly be seen if for no other reason than that they are major. One is that the System is a single, integrated enterprise with the sole mission of providing nationwide telecommunications service. It has its own research and development department where some of the world's best scientists are searching for new and more efficient ways to provide service. It also has its own manufacturing unit where the researches of the scientists become the actual hardware eventually used in rendering service. Then comes the geographical extension, the far-flung presence, across the country of the total carrier facilities. These are the System's Long Lines Department and the twenty-three regional, operating Bell Telephone companies. It is a totally integrated system, a network, and because of this is able, in my opinion, to attain an efficiency, and a cost control, together with a symmetry and logic of effort, that an unintegrated, indeed dismembered, system could never hope to attain.

The Bell System is of course monopolistic. But monopolistic for whose benefit? Or, asked another way, is it a bad or a good monopoly? Although having observed the enterprise only through one state's experience, albeit it a populous state's, I'm no less convinced that, on balance, Bell's single, integrated operation is overwhelmingly the best arrangement for the greatest number of ordinary telephone users across the country. This of course is not to say it's the best arrangement for the specialized common carriers that would like, in certain selected, lucrative areas, to compete with Bell; it's not the best for the unregulated makers of customer-used equipment who seek interconnection for their equipment into Bell's network; nor certainly is it best for the special interest entities that would like to take over Bell's research and development efforts and its manufacturing business. To these people it is in fact a bad monopoly. But, in my opinion, it's best for the general public.

State regulators are concerned over the threat to the quality of service from unrestricted connection of customer-provided equipment into the System's network. I am gratified to say that when *Carterfone* was pending before the F.C.C., the Illinois Commerce Commission supported the NARUC's position opposing the authorization of any type of interconnection not provided by Bell because of the threat to existing service standards.

But, as I have already intimated, it is in the vital area of the *pricing* of telephone service to the millions of Bell customers in the various states that the state regulator's greatest fears arise—more than ever when he studies the current proposals urging more competition in the telecommunications industry. This is especially true of regulators who come from the economically deprived areas of their states and who care about the plight of the poor. I realize there may be a question of propriety in looking upon a commissioner as having a special constituency, especially one based on income, for his statutory responsibilities are statewide, embracing all economic elements and interests. But the practical fact of the matter is that a regulatory body is the creature of the legislature and the legislators themselves do have constituencies. The points of view and predilections of these constituencies, as reflected by the legislators from the area, the area from which the regulator may also come, are often brought graphically, forcefully to his attention. In short, depending on what general economic milieu he hails from, the regulator may sometimes find himself articulating this concern rather than that, or emphasizing certain aspects of his responsibility more than he does others. It serves to remind us that state utility commissions are created to implement the more basic legislative policies or tendencies and are in this sense quasi-legislative. But this is democracy at work and needs no defense. It is also a fact of life.

This means not only that the poor—Blacks, Latins, Chicanos, Appalachians, and others—are getting serious consideration of their problems, but also that

the plight of the chronically ill citizens, and their families, burdened by outlandish medical costs, and the pensioners, with none of the hedges against inflation, are getting attention. Directly or indirectly, there are many millions of such people affected. These are the people who are of primary concern to an ever-increasing number of state regulators when they must establish rates for public utility service. Nor are they so unsophisticated as to be oblivious of the real danger, despite its guise of social benefactor—they fear talk of competition.

We shall see in a situation or two how this works. In a telephone rate case, the regulator's first task is to ascertain the company's overall revenue requirements. The technique, though not simple, is rather inelastic in that it is more or less fixed by statute as construed by the courts. This requires that the commission, after validating the company's revenue and expense claims, allow the company, with absolute fairness—this is important—the dollars of operating revenues which will afford it the opportunity at least to earn a fair rate of return on the capital investment committed to public utility service. If competition has dried up some of the company's former sources of revenue, this fact will immediately surface in the form of *abnormal* revenue deficiencies, i.e., deficiencies caused by outright loss of business, or at least by depressed volume of business. The commission must then as a result raise its sights and begin thinking, to some extent certainly, in terms of across-the-board increases—i.e., increases for everybody—in order to make up this lost revenue so as to meet the company's total revenue requirements.

But even after the commission has cleared this first hurdle, i.e., determining revenue requirements, it is by no means, to use the vernacular, out of the woods; it still isn't free of the problems competition can make for it. Once the dollar figure of revenue requirement has been duly arrived at, the commission still faces the thorny question of how it will spread the dollars of requirement among the various categories of customers. This is the crucial point in the rate-making process, the point at which the regulator needs all of the resourcefulness and latitude he can muster—plus the wisdom of Solomon.

It too is the point at which social and philosophical considerations inevitably enter into the process. Much skill, plus the highest motivation, are required of the regulator if finally he is to give effect to the broader, more humane, public interest dictates. Yet this is also the point at which he encounters the various proposals of special interest industries which, in the guise of fighting unnatural monopoly, in the name of competition, and enhanced price-earnings ratios, see opportunities to selectively skim the cream off certain of Bell's operations which heretofore have been made use of by the regulator to moderate telephone charges to the average household telephone user.

These special interest entities propose, for example, that the interconnect industry be given free rein to connect customer-provided equipment into the Bell network; that specialized common carriers be permitted to compete with Bell in the furnishing of private line services to the large, lucrative communications users; that AT&T be made to spin off Western Electric and Bell Laboratories. The fears of the state regulator are understandable. He sees that these insistent, and highly selective, proposals can very well result in killing the goose that for all these years has been laying the golden eggs for the "little guy." The regulator up to now has had at least some latitude in setting rates for the various classes of customers, but if Bell is now forced into a competitive situation with various special interest industries, there is almost certain to follow the necessity to realign rates for the different categories of customers, which can only mean disproportionate rate increases to the poor and other small users.

At present, the state regulator is able to design rates in a way that the charge for the basic services—i.e., for the use of his telephone by the average householder—is held low, while other charges, such as for terminal facilities, extensions, PBX's, etc., are kept higher. Also, residential rates are invariably kept lower than business rates. These rate policies are not new, but historical, and have served the nation well.

But now these new—and I can only call them selfish—interests have appeared with the clear intention of underpricing in those special areas in which regulators have heretofore kept the prices higher; kept them higher in order to provide lower, though reasonable, charges for the great body of household telephone users across the country. Such competition may be good for these

special interest entities which are not at all averse to competing with a regulated system. But it is not good, in my opinion, for the American public, especially the part of it which is economically disadvantaged—the unfortunate. It ties the regulator's hands as he attempts to set rates which will meet overall public interest standards—and especially the needs of the poor, the elderly, and the ill.

To allow selective entry into this market by, for example, the specialized common carrier can only result in a further dislocation of present tenuous regulatory rate options. Regulators would then have no choice but to give greater weight than formerly to the cost of serving each class of customer, with the result that a steeper rate of increase to the lower-income telephone user would be inescapable. Some may ask, "What's wrong with that? This customer is only being asked to pay his fair share—what it costs to serve him." What, in my opinion, is wrong with it is that it lacks the input of responsible government with a social conscience—without which a government will not long be governing.

The Bell System is big. Moreover, it is run by human beings and is therefore fallible. Government, itself not infallible, *should* scrutinize it—constantly. Government regulators are responsible for the present pricing structure of telephone rates in the interest of all the people and, indeed, regulators are responsible for the relatively higher rates to big business that make the Bell System so vulnerable to selective competitors.

In addition to telephone rates themselves, regulators are responsible for reviewing the reasonableness of the profits of the Western Electric Company and the prices Western charges to the telephone operating companies. I would deny the contention of a witness who appeared before this Committee on August 1 of last year (Mr. Vlachos) that regulators have confiscated Western earnings. But I readily admit, and am proud to admit, that Mr. Vlachos is correct in his statement that regulation has been effective in holding down Western's profits. If Western Electric were divested from the Bell System, as proposed by several witnesses before this Committee, regulators would lose their presently effective control of Western profits. Telephone rates would inevitably rise, as Western prices and profits rise, for we would have no more control over the prices paid by a telephone operating company to an unaffiliated Western Electric than we now have over the price paid for trucks, buildings and other purchases by the telephone companies from unaffiliated suppliers.

All things considered, experience as a regulator has given me the firm opinion that it would be contrary to the interest of the public to open up to selective competitors the intercity private line business, to allow interconnection into the Bell System network by customer-provided equipment and systems manufactured by unregulated competitors, and, most serious of all, to require Bell to divest itself of both its research and manufacturing arms. It should not be overlooked that if the proposed action were indicated, and taken, we shall be left with a radically different Bell System from that we have known—the System which, whatever its faults, gave us the world's best telephone service, with the widest availability ever, and, under enlightened regulation at the state level, at modest rates. I urge you gentlemen to consider the interest of the general public—all telephone users, large and small—in your consideration of the dangerous proposals before your Committee. Thank you, Mr. Chairman.

EXHIBIT 2.—*Study of W. K. Jones Re Interconnection of Customer-Owned Equipment With Telephone Network*

INTERCONNECTION OF CUSTOMER OWNED EQUIPMENT WITH THE TELEPHONE NETWORK

William K. Jones, Deputy Chairman and Commissioner, New York State Public Service Commission (Presented to a Seminar of the International Communications Association, Phoenix, Ariz., January 25, 1973).

State regulatory officials are not united on a single approach to the question of interconnection of customer owned equipment with the telephone network.

Even within a single agency—such as the New York Public Service Commission, of which I am a member—there is a significant diversity of viewpoints among the various commissioners and staff members. In view of the complexity of the subject matter, and the substantial changes that may be wrought by the interconnection of large quantities of customer owned equipment with the telephone network, it is not surprising that such a diversity of viewpoints has developed.

THE GENERAL PERSPECTIVE

Before discussing specific issues, I wish to touch on the matter of general outlook, which bears heavily on the way in which specific issues are initially presented and ultimately resolved.

One point of view—which I will denominate the “free market” approach—begins with the proposition that, as a general matter, the economy will prosper and the welfare of consumers will be advanced if business firms are afforded maximum latitude in competing with one another in seeking to satisfy the needs and desires of particular customers. The regulation of public utilities is seen as an exception to this general approach, an exception made necessary by the inevitably monopolistic character of major aspects of public utility operations. But—say the free market exponents—the exception should be no broader than the conditions which make it necessary: to the extent that some portion of a public utility operation may be conducted under competitive conditions, that segment should be removed from the regulatory sphere and made the subject of customer choice among competing firms. The “free market” school of thought generally is enthusiastic in its endorsement of the Carterfone decision, favors the liberalization of interconnection standards, and views as desirable the transition of telephonic terminal equipment from the regulated sector of the economy to the competitive sphere.

The opposing point of view—which I will describe as the “traditional regulatory” approach—begins with the telephone network as it is presently operated and regulated. It concludes that the present system is functioning satisfactorily, in most if not all aspects, and that any disruption of the present system is therefore more likely to be harmful than beneficial. Accordingly, the “traditional regulatory” attitude is generally hostile to the Carterfone decision, is concerned with possibly harmful technical and economic consequences which may ensue if the interconnection of customer owned equipment with the telephone network becomes extensive, and is generally protective of the status quo.

My own point of view, in spite of the fact that I am a regulatory official, is closer to the “free market” philosophy than the “traditional regulatory” philosophy. My outlook is strongly influenced by the beliefs that:

(1) Regulation, even when it is functioning well, is less than an adequate substitute for the competitive market in encouraging producers to meet consumer demands with maximum responsiveness, efficiency and innovation.

(2) Regulation, and particularly the regulation of telephone companies, often does not function well—for the reason, among others, that the volume of work to be done simply exceeds the capacity of most regulatory agencies to meet the numerous and complex problems that are presented in a timely and effective manner.

(3) Even when a public utility (such as the telephone company) performs reasonably well, there is no means of making a persuasive showing that it could not have done a better job. In the absence of multiple producers who provide a measure of comparison with one another, regulation has an unavoidable “credibility gap” which is a hindrance to effective public administration.

Having made manifest my general outlook—or prejudices if you prefer—let me proceed to some of the specific issues.

TECHNICAL STANDARDS

There is general agreement, among both schools of thought, that the telephone network should be protected from degradation resulting from the interconnection of improperly designed, manufactured, installed or maintained customer owned equipment. There also seems to be widespread agreement that, through use of an interface device, an acceptable level of protection can be achieved against most kinds of technical harm to the network and that, in some circumstances at least, something other than an interface device will suffice.

The "free market" exponents have tended to press for greater reliance on certification and inspection of customer owned equipment, rather than interface devices, to assure conformity with proper technical standards. The "traditional regulatory" approach has been to resist any such movement and to insist on the continued presence of the interface device. Volumes have been written on relatively narrow facets of the problem of technical standards, and I could not hope to rival the extensive studies of others in this field. However, I do have some general observations:

First, there is a strong case for proceeding cautiously in view of the seriousness of the threat of degradation of the telephone network and the great difficulty of remedying a condition of network degradation after substantial quantities of offending equipment are owned by interconnecting telephone subscribers.

Second, caution is not synonymous with paralysis. If certification is not permitted because its effectiveness as a safeguard is not proven, and if effectiveness of certification cannot be proven because its use is not permitted, obviously we are caught in a circle which leads nowhere. The solution, it seems to me, is to proceed experimentally in limited areas, or with respect to specific types of apparatus, and to tailor future programs in light of the experience gained in the initial efforts. The Federal Communications Commission, working in conjunction with State regulatory officials, is concentrating on standards for specific types of apparatus (such as PBX equipment). The New York Commission, at the behest of Rochester Telephone Corporation, is examining the feasibility of a liberalized form of interconnection in a limited geographical area. From the vantage point of technical standards, I believe that such piecemeal moves are appropriate responses in an area where both caution and experimentation are necessary.

Third, some care must be taken in the development of technical standards to preclude their use, intended or unintended, for anticompetitive purposes. In connection with the recent Rochester Telephone tariff filing in New York, several provisions presenting a possibility of anticompetitive abuse were considered. For example, Rochester Telephone proposed to ban the mixture of company-owned and customer-owned terminal equipment on the same telephone access line, advancing a justification related to technical ease in testing for equipment defects; the New York Commission considered the justification to be insufficient to preclude the severe limitation on customer flexibility which the "no mix" restriction would have imposed. Further, Rochester Telephone did not propose to offer standard interface devices that would obviate the need to resort to the Company's proposal requiring certification and inspection of customer owned equipment; some customers and equipment suppliers feared that Rochester Telephone, in exercising discretion with respect to certification and inspection, might discriminate against customer owned equipment in order to favor its own equipment offerings. The New York Commission ordered that the more commonly used interface devices be offered by Rochester Telephone. But the Commission also recognized that some discretion had to remain with the telephone company in allowing or disallowing interconnection of customer owned equipment with the telephone network, and that regulatory surveillance would be necessary to safeguard against abuse of this discretion. As in the case of technical standards generally, some experience is necessary in order to judge the magnitude of these problems and the most appropriate means of affording protection.

This raises one of the main questions pertaining to certification and inspection: who is to perform this function? A regulatory body, state or federal, should have the final word on any general policy issue concerning the propriety of certification or inspection. But there is a legitimate question, in my view, whether the initial responsibility should be exercised by the telephone company, in order to centralize responsibility for maintaining a high quality of telephone service, or whether the initial responsibility should be vested in some independent testing organization, in order to avoid the potential for discrimination by the telephone company against terminal equipment not owned by the telephone company. My present inclination is to favor placing initial responsibility with the telephone company as opposed to the independent testing organization because I regard the centralization of responsibility for telephone network quality to be more important than possible instances of telephone company discrimination which might escape regulatory correction. But I am

prepared to accept a different ordering of priorities if the problem of telephone company discrimination proves to be larger and less manageable than I anticipate. And it is entirely conceivable that independent laboratories and type certification may be used for some purposes and telephone company standards and inspections for other purposes.

ECONOMIC IMPACT

Critics of extensive interconnection of customer owned equipment with the telephone network perceive several kinds of adverse economic impact upon the telephone company and its customers resulting from such interconnection. I will designate these as the subsidy argument, the obsolescence argument, and the risk argument.

(1) *The subsidy argument.*—The subsidy argument runs as follows: Telephone company charges for specialized terminal equipment return a higher profit to the company than telephone company charges for other, more basic and conventional services. If the extensive interconnection of customer owned equipment deprives the telephone company of the "high" return from terminal equipment, charges will have to be raised on other services providing a "low" return in order to make up the deficit. In short, provision of interconnection opportunities to the more sophisticated elements of the business community will occur at the expense of residential and other smaller, more ordinary telephone customers.

I do not find the subsidy argument to be at all persuasive. Accepting the proposition that the return on telephone company terminal equipment is higher than the return on basic services (despite some inadequacies in available data), I have the following problems:

(a) It is not clear to me that users of sophisticated terminal equipment—business, government or other—should be subsidizing other classes of telephone users. If this were a subsidy of some significance, I would assume that various participants in the debate would have a much clearer idea than has been expressed to date as to the magnitude of the subsidy and its significance to various classes of supposed beneficiaries. Why, for example, should a hospital in Harlem, using company-owned terminal equipment, be called upon to subsidize residential service for a subscriber in Scarsdale?

(b) Assuming that it is desirable to subsidize one class of telephone subscribers by charging higher rates to another class, it is not clear to me why competition in the terminal equipment market has to be impeded in order to accomplish this objective. Business customers can be charged higher access rates, or other premium charges, if this is considered good social policy—without regard to whose terminal equipment they may be using. Incidentally, high charges to business users may well be justified on straight cost causation grounds—because of their contribution to peaking problems on telephone switching and trunking facilities. But the nature of these higher charges, whether determined by classification of customer or time of usage, has only a remote relation to the presence or absence of sophisticated terminal equipment on the customer's premises. An entirely different kind of inquiry is needed.

(c) As a general matter, I consider subsidies to be poor public policy. More often than not, the beneficiaries are other than those intended to be benefited, or are persons for whom privileged treatment is hard to justify. And even when subsidies are sound at the time they are initially conceived, they often are difficult to remove after their justification has been erased by the passage of time. Hidden subsidies are even more obnoxious, because their covert character makes it even more likely that their effects will be less closely monitored and that any proposed change will be met by fierce resistance, which, as in the case of telephone terminal equipment, appears to be fed by fear of the unknown. Resistance to change, of course, can mean resistance to progress—particularly, where the resistance is rooted in economic self-interest and is impervious to any attempt at a dispassionate view of the merits. I would re-

mind those who slough off innovations in terminal equipment as mere "luxuries," or gadgetry of use only to the affluent or the business community, that all of the major utility services—gas, electricity, telephone—began as "luxuries," with only a few visionaries then contemplating the widespread use of these services by the ordinary citizen.

I agree that every effort should be made to keep charges for basic telephone service down in order to encourage the universal availability of the telephone. But I dispute the proposition that maintenance of a telephone company monopoly over terminal equipment is either necessary or appropriate for this purpose.

2. *The obsolescence argument.*—The obsolescence argument is both more technical and more practical. Critics of extensive interconnection of customer owned equipment with the telephone network fear that, in the short run, telephone companies will find themselves with excessive inventories of terminal equipment supplanted by customer owned devices, and, in the long run, will experience shorter service lives on terminal equipment because of the more ready substitution of customer owned equipment.

With respect to the short run, I note that the *Carterfone* decision was handed down over four and one half years ago, and there is as yet no indication that the telephone companies are burdened with significant quantities of obsolete inventories. Particularly in view of the gradualism which is likely to prevail because of the complexities intrinsic in developing appropriate technical standards, I seriously doubt that the telephone companies will be able to claim surprise as to the growth of customer owned equipment either now or in the near future. Most likely, the growth of customer owned terminal equipment will be matched by a reduction in the growth of new telephone company terminal equipment, rather than a sudden absolute decline in attachments of telephone company terminal equipment.

As in the case of central office equipment, outside plant is not affected significantly by degree of subscriber use—i.e., it is not consumed by such use. Outside plant is replaced when it is rendered obsolete by growth or by technical change or when it is destroyed or deteriorated as a result of exposure to the elements, vandalism, fires, floods, and the like. Accordingly, no portion of outside plant is allocated to customer usage unrelated to demand. The trunking portion is allocated to the demand-related aspect of general exchange purposes. The subscriber loops portion is allocated to the customer-related aspect of general exchange purposes.

Allocation of the revenue requirement associated with outside plant among various cost functions yields the following results:

General company purposes (1.25 percent)-----	\$5,954,000
Special services (12.30 percent)-----	58,584,000
Exchange purposes:	
Demand related (15.89 percent)-----	75,684,000
Customer related (70.56 percent)-----	336,076,000
Total (100 percent)-----	476,298,000

C. *Station apparatus and connections.* From Table 4, it is seen that \$536,699,000 in revenue requirement is associated with station apparatus and connections. The Cost of Service study submitted in Case 26080 indicates that 64.04 percent of station apparatus and equipment is used for special services (including coin telephones), 1.93 percent as a result of unanticipated obsolescence—should be written off below the line rather than recovered from telephone company subscribers.

In saying this, I do not wish to foreclose the possibility of adopting a middle course involving the creation of a "floating" reserve against obsolescence, which might apply to a broad range of telephone company terminal equipment offerings, and which might be tapped in the event any particular line of terminal equipment became obsolete prior to the accrual of a sufficient depreciation reserve applicable to that particular line. The reserve would be built by small additional depreciation accruals applicable to all competitive terminal

equipment offerings, and, once again, I would be inclined to leave with telephone company management substantial discretion as to the existence and size of such a reserve—as long as it is clearly limited in scope to competitive product lines.

THE RISK ARGUMENT

This brings me to the risk argument. If a substantial portion of the telephone company's business is to be exposed to competitive pressures, will it not be a riskier business and will this not have an adverse impact on the cost of raising capital for all telephone company operations, competitive and non-competitive alike? This point appears to me to have greater merit than either of the preceding, and in fact is strengthened by my suggestion that any losses incurred as a result of inadequate depreciation reserves pertaining to obsolete telephone company terminal equipment should be written off below the line rather than charged to subscribers of non-competitive services. Even so, the nature and extent of this risk should not be exaggerated. For although telephone company investments in terminal equipment may be riskier than previously, the financial soundness of the telephone utility should not be threatened. And the degree of risk associated with competitive terminal equipment may be held within reasonable bounds by judicious telephone company management, and, if necessary, by regulatory intervention to curb clearly reckless courses of action by must be paid in order to provide customers with a choice among competitive telephone companies. But some increase in risk is the unavoidable price that suppliers. Progress frequently has its price, and, in the case of telephone terminal equipment, the price to the general telephone subscriber is most likely to appear in the form of a slightly higher cost of capital to the telephone company. Yet even this result is not certain. Much depends on the course of action chosen by telephone company management, the success or failure of such action, the regulatory response in the event of costly failures, and the possibly offsetting gain to the telephone companies (assuming extensive interconnections of customer owned equipment) of having to raise lesser volumes of capital in periods of capital scarcity.

The problem of economic impact has many additional ramifications—the possible need to revise interstate separations techniques and toll settlement arrangements to reduce or eliminate reliance on telephone company terminal equipment investment in developing criteria for revenue requirements; the possibility that some activities of the telephone companies, such as maintenance or sales, may become more or less expensive; possible difficulties in locating the source of service deficiencies, when either subscriber owned equipment or telephone company equipment may be at fault. Some of these may be proven to be more troublesome than I presently anticipate, and other matters not now thought to be important may loom larger in the future than any of the arguments that I have discussed. But all change involves some measure of risk. The risks involved here do not appear to be unusually large or unmanageable, particularly in view of the fact that the transition to subscriber owned equipment is likely to be gradual and closely monitored.

RESPONSIVE PRICING

There is, of course, the substantial prospect that telephone companies, confronted with competition in the terminal equipment market, will rise to the challenge and, by providing appropriate combinations of price and quality, maintain a major share of the market. It would not surprise me if this should prove to be the case. But the response of the telephone company to competition in the terminal equipment market poses significant problems for regulators. And unlike the questions of technical standards and extent of permissible subscriber interconnection, where federally promulgated standards are likely to be dominant, if not determinative, most responsive pricing by telephone companies will come in the form of tariff filings with state agencies involving intrastate rates for carrier-supplied terminal equipment.

The problem, here, is to walk a line between permitting the telephone company freedom to exploit any advantage of quality or price it might have in relation to an independent equipment supplier, while, at the same time, precluding it from relying on its noncompetitive services to subsidize noncompensatory pricing in the competitive sector. We shall be hearing a good deal about incremental cost pricing, and I am inclined to agree that competitive offerings should be permitted by the telephone company at any price that does not cast a burden on subscribers to monopoly services. But I am suspicious of price justifications that assume that all of the overhead of the telephone company is attributable to other traffic and none (or very little) should be charged to the particular competitive offering under consideration. In the absence of justification for a different approach, I would insist that prices for competitive as well as noncompetitive offering bear their pro rata share of overheads not otherwise allocable (in proportion to revenues in the absence of some other, more appropriate standard).

I have already mentioned the need for consideration, in telephone company pricing, of a reserve for premature obsolescence of competitive equipment. I expect, furthermore, that the impetus provided by competition will greatly sharpen the analysis of costs for particular services in the telephone industry, a development which is long overdue. But in doubtful cases, I would be inclined to permit the telephone companies more rather than less freedom to compete in price with respect to terminal equipment offerings.

In the matter of responsive pricing, procedures can be as important as substantive standards. It is of benefit neither to the telephone company nor its customers for a commission to sanction a proposed rate reduction on a competitive offering if, while the legality of the reduction is being litigated, the proposed reduced rate is suspended for a year or more. The New York Commission, in another case involving Rochester Telephone—in this instance, its charges for a competitive paging service—expressed a policy which I believe to be appropriate:

(a) Suspension of a proposed rate reduction on a competitive offering should be considered only when "there is a substantial probability that the rates are noncompensatory" and "there is a substantial danger that a competition will be eliminated if the reduced rates are put in effect." Unless both conditions are met, the reduced rates should be permitted to remain in effect while their legality is being scrutinized.

(b) If upon extended examination, it appears that the reduced rates are noncompensatory or otherwise improper, they may be revised for the future. The public is adequately protected as long as any revenue loss attributable to the reduced rates is not permitted to be imposed on other telephone subscribers. This is consistent with the view I have previously expressed with respect to reserves for obsolescence of competitive equipment, and will increase the need for careful cost analysis in general rate proceedings as well as in contests over particular competitive rates.

In sum, I consider it preferable to run the risk of having a telephone company occasionally charge a noncompensatory rate than to restrict unduly the ability of telephone companies to compete. Indeed, since the most critical factors in determining the compensatory character of a competitive rate are likely not to be ascertainable in advance with any degree of precision—*i.e.*, the extent of market penetration to be achieved and the rapidity of obsolescence to be experienced—some noncompensatory rates are a near certainty. But the answer, in my view, is not to encumber unduly the competitive price responses of the telephone companies, but to assure, through careful cost analysis in general rate proceedings, that telephone company losses incurred in the competitive sector are not thrust upon subscribers to monopoly services. This will increase the risk to stockholders, and possibly the cost of capital to telephone companies; but I have previously indicated that I consider this to be a reasonable price to pay for progress in the terminal equipment market.

CONCLUSION

I believe that the competitive process can and does bring progress. I concur in the view of the New York Commission, expressed in the Rochester Telephone interconnection case, that "free competition will afford subscribers a wider choice of equipment suited to their needs, will stimulate innovation by increasing the number of participating equipment suppliers, and will promote reduction in cost, especially for those subscribers who require equipment less elaborate than that provided by the telephone company." I consider this to be a realistic expectation, and, if the past is any guide, innovations first developed to serve the sophisticated business user, or the more affluent customer, ultimately will be adapted to the needs of the mass market for the benefit of the public at large.

In the interim, I do not consider that improvements in business efficiency—whether gained through more effective use of telecommunications or other appropriate means—to be a matter of small moment. The dispersion of benefits is sometimes delayed by market rigidities or anticompetitive practices, but I believe that over the long run (and perhaps in the short run as well) market forces will require that independent equipment manufacturers, and the business purchasers of their equipment, pass on to the general public, through lower prices or improved service, the benefits that rebound from greater innovation and efficiency in the business sector. Given the economic climate both at home and abroad, our society urgently needs all of the gains in productivity and improved performance that our business community can provide consistent with other social goals.

TECHNICAL NOTE

Attached is a "Preliminary Memorandum on the Nature of Telephone Company Costs." This Memorandum may be of interest in considering problems presented by the interconnection of customer owned equipment with the telephone network because:

(1) It indicates, in a general way, the kind of approach that might be employed in developing a cost of service study for use in evaluating telephone company pricing practices.

(2) With some adjustments, it indicates the extent of telephone company operations likely to be subjected to competition in the near term. The 28.42% of allocated telephone company revenue requirements associated with "special services" encompasses charges for terminal equipment, subject to competition from private equipment manufacturers, and charges for private lines, subject to competition from specialized carriers. But "special services," as used in the attached memorandum, also includes coin telephones, Yellow Page advertising, and residential extensions, areas where competitive inroads are likely to be slight. Deducting for these items (accounting for 6.67% of allocated telephone company revenue requirements) leaves 21.75% potentially subject to competition.

PRELIMINARY MEMORANDUM ON THE NATURE OF TELEPHONE COMPANY COSTS

Since previous telephone cost of service studies have not proved very illuminating in disclosing the nature of telephone company costs, an effort is made in this memorandum to indicate, in a tentative and preliminary manner, what a telephone cost of service study might show.

This study draws principally on New York Telephone Company's Annual Report to the Commission for 1971, and a Cost of Service Study submitted in Case 26080 by the Telephone Company (based mostly on 1969 data) at the request of the Commission's Staff. The present study attempts to answer this question: On a company-wide basis, to what extent are New York Telephone Company's costs incurred (a) to provide special services (b) to provide basic equipment to the ordinary subscriber, (c) to provide facilities required to meet peak demands on Company switching and trunking facilities, and (d) to permit use of the telephone company network by general subscribers in both peak as well as non-peak periods.

The study concludes that, if the 9.19 percent of total Company expense which is not allocable to any of the above headings is placed to one side, allocable Company expenses may be classified as follows:

	Percent
Special services.....	28.42
General exchange (including toll) :	
Customer related.....	31.24
Demand related.....	26.06
Use related.....	14.28

The various assumptions and estimates used in reaching these conclusions are indicated at various points in the study. The final section sets forth a number of limitations under which this study was prepared, and the types of adjustments and refinements that would be necessary in order to prepare a cost of service study which would be helpful in judging the appropriateness of the Company's pricing policies in the light of underlying costs.

I. COMPANYWIDE FINANCIAL STATISTICS FOR 1971 (AS ADJUSTED)

Financial data for the calendar year 1971, taken from the Company's most recent Annual Report to the Commission, were used as a point of departure. In order to adjust for a depressed rate of return for 1971 (5.23%), revenues were increased \$322,205 (adjustment 1) and corresponding changes were made in expenses related to revenue or income: Acct. 674 (AT&T license fee, adjustment 2); Acct. 306 (Federal Income Taxes—Operating, adjustment 3); and Acct. 307 (Other Operating Taxes—Revenue Taxes, adjustment 4).

TABLE 1
[In thousands]

	Per books	Adjusted	Pro forma
Operating revenues.....	\$2,243,299	¹ \$322,205	\$2,565,504
Operating expenses.....	1,599,873	² 3,222	1,603,095
Operating taxes.....	307,101	³ 11,277	318,378
Interest during construction—Cr.....	(35,698)		(35,698)
Balance for return before Federal income taxes.....	372,023	307,706	679,729
Federal income taxes.....	54,443	⁴ 147,699	242,142
Balance for return.....	277,580	160,007	437,587

¹ Adjustment revenues increased.

² Adjustment for license fee, account 674.

³ Adjustment for operating and revenue taxes, account 307.

⁴ Adjustment for Federal income taxes and operating, account 306.

The rate base for 1971 was computed on the basis of an average of the balances on January 1, 1971 and December 31, 1971, as shown in the Company's 1971 Annual Report to the Commission:

TABLE 2
[In thousands]

Telephone plant in service.....	\$6,314,572
Depreciation reserve.....	(1,573,383)
Telephone plant under construction.....	482,877
Property held for future use.....	16,517
Accumulated investment credit.....	(70,435)
Deferred income taxes.....	(26,653)
Material and supplies.....	44,467
Prepayments.....	26,954
Cash working capital ¹	88,606
Rate base.....	5,303,522

¹ Cash working capital was computed as follows:

Total operating expenses.....	\$1,599,873,000
Less: Amortization and depreciation.....	334,076,000

Allowance for lag days²..... 1,265,797,000

Cash working capital..... 88,606,000

² Weighted requirement equivalent to 25.3 days computed in case 26080.

The pro forma balance for return is equal to 8.25% of the average rate base for 1971.

II. COMPANYWIDE INVESTMENT ACCOUNTS FOR 1971

The Company's investment in plant, as reported in its 1971 Annual Report, is divided into a number of plan accounts which, for present purposes, may be grouped as follows:

TABLE 3
[In thousands]

	Average balance		Average net plant balance
	Plant in service	Depreciation reserve	
Land and buildings (accounts 211 and 212).....	\$600, 444	\$118, 528	\$481, 916
Central office equipment (account 221).....	2, 302, 835	777, 370	1, 525, 465
Station apparatus and connections (accounts 231 and 232)....	1, 366, 695	204, 839	1, 161, 856
Large PBX (account 234).....	322, 431	52, 701	269, 730
Outdoor plant (accounts 241, 242, 243, and 244).....	1, 590, 456	326, 174	1, 264, 282
Furniture and office equipment (account 261).....	51, 626	10, 617	41, 009
Vehicles and work equipment (account 264).....	79, 865	21, 353	58, 512
Miscellaneous minor adjustments (account 276 and unallocated depreciation reserve).....	220	61, 801	(61, 581)
Telephone plant total.....	6, 314, 572	1, 573, 383	4, 741, 189
Working capital (from table 2).....			160, 027
Total net plant in service and working capital.....			4, 901, 216

III. CAPITAL ASSOCIATED REVENUE REQUIREMENTS (COMPANY-WIDE)

Allocation of telephone plant in service among different cost categories is the important initial step in any meaningful cost allocation study because, as illustrated by the following tabulation, \$1,918,007,000 of the \$2,565,504,000 revenue requirement for 1971—or almost 75 percent—is traceable in a fairly direct manner to the Company's investment accounts.

Column (1) of Table 4 is the revenue required from each investment category in order to provide the balance required for return and federal income taxes. From Table 1 it is seen that companywide revenues required for return and federal income taxes, less credit for interest during construction, is \$644,031,000. From Table 3 it is seen that the sum of telephone net plant in service in 1971, plus an allowance for working capital, is \$4,901,216,000. The ratio of the stated revenue requirement to this investment is 13.14 percent. The figures in Column (1) of Table 4 are derived by multiplying each average net plant balance in Table 4 by 13.14%. Allocation of income taxes may be subject to further refinement not undertaken in this study.

Column (2) of Table 4 is depreciation expense associated with each of the investment accounts. These figures are taken from the Company's 1971 Annual Report to the Commission.

Column (3) of Table 4 is repair and maintenance expense associated with each of the investment accounts. The figures are taken from the Company's 1971 Annual Report to the Commission. The single figure given in the Report for "Repairs of Station Equipment" (\$166,841,000) was divided between "Station Apparatus and Connections" and "Large PBX" in proportion to the capital balances in the two accounts. "Test Desk" expenses were included under outside plant and expenses of "Maintaining Transmission Power" were included under central office equipment.¹

¹ A more refined study would classify "Test Desk" expenses specifically in accordance with the cause for their incurrence: outside plant; station apparatus and connections; large PBX; and perhaps central office equipment.

Column (4) of Table 4 is the relief, pension and social security expense associated with the wages included in the repair and maintenance expense of Column (3). In 1971, relief and pension expense amounted to \$142,162,000. Social security payments charged to operating expenses amounted to \$31,313,000. Total payroll charged to operating expenses during 1971 was estimated at \$758,000,000. The sum of relief, pensions and social security payments (\$173,475,000) divided by total payroll is 22.89 percent.

From the cost of service study submitted in Case 26080, it appears that the following proportions of various repair and maintenance accounts are wages and salaries. When these proportions are multiplied by 22.89%, the resulting percentage may be applied to the repair and maintenance figures in Column (3) in order to derive the appropriate charges for relief, pensions and social security:

	Proportion charged to wages and salaries	Multiplied by 22.89 percent
Outside plant.....	\$71.32	16.33
Test desk (associated with outside plant)	88.53	20.26
Central office equipment	74.37	17.02
Station equipment (also used for large PBX)	60.23	13.79
Buildings and grounds.....	32.88	7.53
Unallocated	54.82	12.55

Column (5) of Table 4 is ad valorem taxes associated with each of the investment accounts. From the Company's 1971 Annual Report, ad valorem taxes charged to operations amounted to \$195,920,000. Net telephone plant in service in 1971 (exclusive of furniture, office equipment, vehicles and other equipment) totaled \$4,464,668,000. The ratio of ad valorem taxes to property subject to tax is 4.22 percent. Application of this percentage to the pertinent property accounts in Table 3 yields the results in Column (5) of Table 4.²

Column (6) of Table 4 divides the operating rents paid by the Company in 1971 among appropriate investment accounts. These expenditures were for the use of property of others in lieu of the Company's own property.

Column (7) of Table 4 is the sum of amounts included for each investment account in columns (1) through (6).

Column (8) of Table 4 is the additional revenue required for the AT&T license fee (based on gross revenues) and revenue taxes associated with the revenue requirements summarized in Column (6). The amounts are computed as follows:

License fee (1971 annual report).....	\$21,159,000
Pro forma adjustment (table 1).....	3,222,000
Revenue taxes (1971 annual report).....	79,191,000
Pro forma adjustment (table 1).....	11,277,000

Total 114,849,000

Pro forma 1971 gross revenues (table 1).....	2,565,504,000
Total revenue-related expenses.....	114,849,000

Gross revenues less revenue-related expenses..... 2,450,655,000

NOTE.—Ratio to be applied to column (7) is 114,849,000, over 2,450,655,000 equals 4.69 percent.

Column (9) of Table 4 provides the total revenue requirement associated with each group of plant accounts.

² Property taxes are more closely related to gross plant than to net plant, but any distortion resulting from use of net plant probably is not significant.

TABLE 4
[In thousands of dollars]

	Return and Federal income tax (1)	Depreciation (2)	Repair and maintenance (3)	Relief, pensions, and social security (4)	Ad valorem taxes (5)	Operating rents (6)	Subtotal (7)	License fee and revenue taxes (8)	Total (9)
Land and buildings.....	63,375	13,048	20,417	1,537	20,346	22,600	141,273	6,621	147,894
Central office equipment.....	200,443	104,154	189,494	32,252	64,388	979	591,716	27,731	619,447
Station apparatus and connections.....	152,670	156,754	135,408	18,673	49,041	87	512,673	24,926	536,599
Large PBX.....	35,443	19,673	31,433	4,335	11,385	---	102,269	4,793	107,062
Outside plant.....	166,129	38,115	155,262	28,345	53,364	13,761	454,976	21,322	476,298
Furniture and office equipment.....	5,389	2,128	---	---	---	---	7,517	352	7,869
Vehicles and work equipment.....	7,689	(1)	---	---	---	---	7,689	360	8,049
Unallocated and miscellaneous.....	(8,082)	---	3,292	413	(2,639)	---	(6,995)	(328)	(7,324)
Working capital.....	21,028	---	---	---	---	---	21,028	985	22,013
Total.....	644,030	333,912	535,306	85,555	195,915	37,427	1,832,145	85,862	1,918,007

¹ Most of the amount shown in this account on the company's books is reflected in other expense categories, principally repair and maintenance expense.

IV. ALLOCATION OF COMPANY-WIDE CAPITAL-ASSOCIATED REVENUE REQUIREMENTS

From the preceding table it is seen that \$1,918,007,000 of the Company's 1971 revenue requirement is associated, in a rather direct manner, with various capital plant accounts. Using data provided in the Cost of Service study submitted in Case 26080, it is possible to allocate this revenue requirement among broad classes of cost categories: general company purposes; special services;² and general subscriber service, subdivided into (a) customer-related costs (costs associated with the addition of customers without regard to customer usage), (b) use-related costs (costs related to customer usage without regard to when the usage occurs) and, (c) demand-related costs (cost related to customer usage during periods of peak demand). Some costs are not susceptible to such classification at this stage; they are reserved for future disposition in conjunction with categories of revenue requirements not primarily associated with Company investments.

A. Central Office Equipment.—From Table 4, it is seen that \$619,447,000 in revenue requirement is associated with central office equipment. The Cost of Service study submitted in Case 26080 indicates that 6.77 percent of such equipment is used for specialized services, 2.05 percent for general company purposes, and the remaining 91.18 percent for general exchange purposes.

Central office equipment is not significantly affected by degree of subscriber use—i.e., it is not consumed by such use. Such equipment is replaced when it is rendered obsolete by growth or by technical change rather than as a consequence of deterioration attributable to usage. Accordingly, no portion of central office equipment is allocated to customer usage unrelated to demand.

Obviously, the most critical feature affecting the design of central office equipment is the volume of switched traffic under conditions of peak demand. However, some aspects of central office design (main frame and customer terminals) are related to the number of customers served by the central office. In the absence of more definitive information, it is assumed that 80 percent of the general exchange portion of central office equipment is demand-related (72.94% of total) and 20 percent of the general exchange portion of central office equipment is customer-related (18.24% of total).

Allocation of the revenue requirement associated with central office equipment among various cost functions yields the following results:

General company purposes (2.05 percent)-----	12, 699, 000
Special services (6.77 percent)-----	41, 936, 000
Exchange purposes:	
Demand related (72.94 percent)-----	451, 825, 000
Customer related (18.24 percent)-----	112, 987, 000
Total (100.00 percent)-----	619, 447, 000

B. Outside Plant.—From Table 4, it is seen that \$476,298,000 in revenue requirement is associated with outside plant. The Cost of Service Study submitted in Case 26080 indicates that 15.89 percent of outside plant is used for trunking purposes, 70.56 percent is used for subscriber loops, 12.30 percent is used for specialized services and 1.25 percent is used for general company purposes.

As in the case of central office equipment, outside plant is not affected significantly by degree of subscriber use—i.e., it is not consumed by such use. Outside plant is replaced when it is rendered obsolete by growth or by technical change or when it is destroyed or deteriorated as a result of exposure to the elements, vandalism, fires, floods, and the like. Accordingly, no portion of outside plant is allocated to customer usage unrelated to demand. The trunking portion is allocated to the demand-related aspect of general exchange purposes. The subscriber loops portion is allocated to the customer-related aspect of general exchange purposes.

Allocation of the revenue requirement associated with outside plant among various cost functions yields the following results:

General company purposes (1.25 percent)-----	5, 954, 000
Special services (12.30 percent)-----	58, 584, 000
Exchange purposes:	
Demand related (15.89 percent)-----	75, 684, 000
Customer related (70.56 percent)-----	336, 076, 000
Total (100.00 percent)-----	476, 298, 000

²For purposes of this study, as indicated hereafter, "special services" include private line services, vertical services, Yellow Pages and coin telephone.

C. Station Apparatus and Connections.—From Table 4, it is seen that \$536,699,000 in revenue requirement is associated with station apparatus and connections. The Cost of Service study submitted in Case 26080 indicates that 64.04 percent of station apparatus and equipment is used for special services (including coin telephones), 1.93 percent is used for general company purposes, and 34.03 percent is used for ordinary exchange purposes.

As in the case of central office equipment and outside plant, station apparatus and connections are not affected significantly by subscriber use—i.e., they are not consumed by such use. Station apparatus and equipment are replaced when rendered obsolete, or when damaged (for reasons normally unrelated to degree of use), or when the subscriber's requirements change. Accordingly, no portion of this investment is allocated to customer usage unrelated to demand. Obviously, the costs involved are customer-related in that they are incurred without regard to the extent or timing of customer usage.

Allocation of the revenue requirement associated with station apparatus and connections among the various cost categories yields the following results:

General company purposes (1.93 percent)-----	10,358,000
Special services (64.04 percent)-----	343,702,000
Exchange (customer related) (34.03 percent)-----	182,639,000
Exchange (customer related) (34.03 percent)-----	182,639,000
Total (100.00 percent)-----	536,699,000

D. Large PBX's.—From Table 4, it is seen that \$107,062,000 in revenue requirement is associated with large PBX's. The Cost of Service study submitted in Case 26080 indicates that 96.46 percent of large PBX's are employed for special services and 3.54 percent for general company purposes. Accordingly, the revenue requirement associated with large PBX's is allocated among the various cost categories as follows:

General company purposes (3.54 percent)-----	3,790,000
Special services (96.46 percent)-----	103,272,000
Total (100.00 percent)-----	107,062,000

E. Land and Buildings.—From Table 4, it is seen that \$147,894,000 in revenue requirement is associated with land and buildings. The Cost of Service study submitted in Case 26080 indicates that 14.05 percent of Company land and buildings is used for general company purposes, 3.49 percent is used for operator quarters and general traffic, 4.35 percent is used by the commercial department, 2.89 percent is used for revenue accounting, 3.16 percent is used for garages, storage areas and the like, and 72.06 percent is used for central office equipment. Investments in space used for operator quarters and general traffic, for the commercial department, and for revenue accounting are reserved for future disposition. The space used for garages, storage and the like is considered to be supportive of outside plant and is assigned on the same basis as outside plant (1.25% general company purposes, 12.30% special services, 15.89% demand-related exchange purposes, 70.56 customer-related exchange purposes). The space used for central office equipment is assigned on the same basis as the central office equipment (6.77% general company purposes, 2.05% special services, 72.94% demand-related exchange purposes, 18.24% customer-related exchange purposes).

The initial computation is as follows:

General company purposes (14.05 percent)-----	20,779,000
Operator quarters, etc. (3.49 percent)-----	5,162,000
Commercial Department (4.35 percent)-----	6,433,000
Revenue Accounting (2.89 percent)-----	4,274,000
Garages, storage, etc.:	
General company purposes (0.04 percent)-----	59,000
Special services (0.39 percent)-----	577,000
Exchange (demand) (0.50 percent)-----	740,000
Exchange (customer) (2.23 percent)-----	3,298,000
Central office equipment:	
General company purposes (1.48 percent)-----	2,189,000
Special services (4.88 percent)-----	7,217,000
Exchange (demand) (52.56 percent)-----	77,733,000
Exchange (customer) (13.14 percent)-----	19,433,000
Total (100.00 percent)-----	147,894,000

Combining similar allocations, the revenue requirement associated with land and buildings is allocated among the various cost categories as follows:

General company purposes (15.57 percent)-----	23, 027, 000
Special services (5.27 percent)-----	7, 794, 000
Exchange:	
Demand related (53.06 percent)-----	78, 473, 000
Customer related (15.37 percent)-----	22, 731, 000
Reserved:	
Operators quarters, etc. (3.49 percent)-----	5, 162, 000
Commercial department (4.35 percent)-----	6, 433, 000
Revenue accounting (2.89 percent)-----	4, 274, 000
Total (100.00 percent)-----	147, 894, 000

F. Furniture and Office Equipment.—From Table 4, it is seen that \$7,869,000 in revenue requirement is associated with furniture and office equipment. The Cost of Service study submitted in Case 26080 indicates that 25.5% of furniture and office equipment is used for general corporate purposes, 12.5% is used by the traffic department, 25.5% is used by the commercial department, 11.4% is used for revenue accounting, and 24.8% is related to use of company plant. The portions related to traffic, commercial and revenue accounting activities will be reserved for future disposition. The portion related to plant is divided 33.0% to central office equipment, 45.7% to station apparatus on a per customer basis and 21.3% to outside plant. The portions assigned to outside plant and central office equipment are further subdivided as in the case of land and buildings.

The resulting allocations to various cost categories are as follows:

General company purposes (26.03 percent)-----	2, 048, 000
Special services (1.20 percent)-----	95, 000
Exchange:	
Demand related (6.81 percent)-----	536, 000
Customer related (16.55 percent)-----	1, 302, 000
Reserved:	
Commercial department (25.50 percent)-----	2, 007, 000
Traffic department (12.50 percent)-----	984, 000
Revenue accounting (11.40 percent)-----	897, 000
Total (100 percent)-----	7, 869, 000

G. Vehicles and Work Equipment.—From Table 4, it is seen that \$8,049,000 in revenue requirement is associated with vehicles and other work equipment. The Cost of Service study submitted in Case 26080 indicates that 27.3% of this total is work equipment which should be divided in the same proportion as outside plant. The remaining 72.7% of the account is vehicles consisting of:

- 46.8% vans (34.02% of total)
- 22.1% construction vehicles (16.07% of total)
- 19.6% supply trucks (14.25% of total)
- 11.5% passenger vehicles (8.36% of total)

The construction vehicles and half of supply trucks (23.20% of the total) are assigned on the basis of outside plant.

The vans and the other half of supply trucks (41.14% of the total) are assigned to stations on a per customer basis. Passenger vehicles (8.36% of the total) are assigned to general corporate purposes.

Making the subdivisions for the outside plant allotments, and combining similar accounts, the following allocations result:

General company purposes (8.99 percent)-----	724, 000
Special services (6.21 percent)-----	500, 000
Exchange:	
Demand related (8.03 percent)-----	646, 000
Customer related (76.77 percent)-----	6, 179, 000
Total (100.00 percent)-----	8, 049, 000

H. Working Capital and Miscellaneous.—The working capital revenue requirement of \$22,013,000 and the miscellaneous negative revenue requirement of \$7,324,000 are allocated to general company purposes. The working capital revenue requirement could be allocated more specifically to other accounts, but this would require an additional detailed analysis not considered necessary for present purposes.

I. Summary.—The following table indicates the results of allocating capital-associated revenue requirements among various cost categories.

TABLE FIVE

[In thousands of dollars]

	General company	Special services	Exchange (demand)	Exchange (customer)	Reserved (operators)	Reserved (commercial)	Reserved (revenue accounting)	Total
Land and buildings.....	23,027	7,794	78,473	22,371	5,162	6,433	4,274	147,894
Central office equipment.....	12,699	41,936	451,825	112,987	-----	-----	-----	619,447
Station apparatus and connections.....	10,358	343,702	-----	182,639	-----	-----	-----	536,699
Large PBX.....	3,790	103,272	-----	-----	-----	-----	-----	107,062
Outside plant.....	5,954	58,584	75,684	336,076	-----	-----	-----	476,298
Furniture and office equipment.....	2,048	95	536	1,302	2,007	984	897	7,869
Vehicles and work equipment.....	724	500	646	6,179	-----	-----	-----	8,049
Unallocated and miscellaneous.....	(7,324)	-----	-----	-----	-----	-----	-----	(7,324)
Working capital.....	22,013	-----	-----	-----	-----	-----	-----	22,013
Total.....	73,289	555,883	607,164	661,914	7,169	7,417	5,171	1,918,007

V. ALLOCATION OF COSTS (COMPANY-WIDE) NOT PRIMARILY ASSOCIATED WITH CAPITAL INVESTMENT

A number of broad categories of Company expense are not primarily associated with capital investment.

A. *Traffic Expenses*.—In 1971, the Company incurred \$199,922,000 in traffic expenses and an additional \$42,559,000 in associated relief, pension and social security payments. The latter figure is based on the premise (derived from the Case 26080 Cost of Service Study) that 93 percent of traffic expenses are wages and salaries; the multiple of 22.89% for relief, pensions and social security, developed in conjunction with maintenance expense, was applied to 93% of this account. To the resulting figure of \$242,481,000 must be added \$11,372,000 to cover the AT&T license fee and revenue taxes (using the 4.69% multiple previously employed), for a total of \$253,853,000. From the preceding section on capital-related revenue requirements an additional \$7,169,000 is added, yielding total traffic expenses of \$261,022,000.

The Cost of Service Study submitted in Case 26080 indicates that 96.27 percent of traffic expenses is allocable to exchange service, 2.13 percent to special services, and 1.60 percent to general company purposes. If public telephone expense (\$600,348 in 1971) is classified as a special service expenditure, then special service expense would be increased by 0.3 percent (600,348/199,922,000) and general exchange expense would be decreased by the same amount. The exchange expense here involved is considered to be responsive to customer usage without regard to whether the usage occurs during periods of peak demand or not. (Traffic engineering is perhaps an exception.)

Traffic expenses are allocated to the various cost categories as follows:

General company purposes (1.60 percent)-----	\$4, 176, 000
Special services (2.43 percent)-----	6, 343, 000
Exchange (usage) (95.97 percent)-----	250, 503, 000
Total (100 percent)-----	261, 022, 000

B. *Commercial Expenses*.—The Company's 1971 Annual Report lists the following commercial expenses.

Account:	
640—General commercial administration-----	\$20, 909, 000
642—Advertising-----	4, 163, 000
643—Sales expense-----	19, 787, 000
644—Connecting company relations-----	141, 000
645—Local commercial expenses-----	78, 252, 000
648—Public telephone commissions-----	14, 307, 000
649—Directory expenses-----	49, 030, 000
650—Other commercial expenses-----	729, 000

Total commercial expenses----- 187, 318, 000

From the Cost of Service study submitted in Case 26080, the wage components of each account can be derived, and, to such wage components, the multiple of 22.89% for pensions, relief and social security can be applied:

Account	Wage component	Wages	Relief, pensions, and social security	Share of total wages
640-----	\$0. 8525	\$17, 825, 000	\$4, 080, 000	\$0. 1598
642-----	. 1815	756, 000	173, 000	. 0068
643-----	. 9062	17, 931, 000	4, 104, 000	. 1608
644-----	. 8801	124, 000	28, 000	. 0011
645-----	1. 8782	68, 721, 000	15, 730, 000	. 6162
648-----				
649-----	. 1171	5, 741, 000	1, 314, 000	. 0515
650-----	. 5743	419, 000	96, 000	. 0038

¹ A clearly erroneous figure given in the case 26080, cost of service study was recomputed from other data given in that study.

The various accounts must be increased by the amounts indicated for relief, pensions and social security, by the additional revenues required for the AT&T

license fee and revenue taxes, and by a pro rata portion of the revenue requirement associated with the capital investment related to the commercial department (see Table 5). The latter apportionment was made in proportion to wages.

[In thousands of dollars]

Account	Book expenses	Relief, pensions, and social security	Subtotal	Revenue addition (4.69 percent)	Pro rata share of capital-associated revenue requirement	Total
640.....	20,909	4,080	24,989	26,161	1,185	27,346
642.....	4,163	173	4,336	4,539	51	4,590
643.....	19,787	4,104	23,891	25,011	1,193	26,204
644.....	141	28	169	177	8	185
645.....	78,252	15,730	93,982	98,390	4,570	102,960
648.....	14,307	-----	14,307	14,978	-----	14,978
649.....	49,030	1,314	50,344	52,705	382	53,087
650.....	729	96	825	864	28	892
Total.....	187,318	25,525	212,843	222,825	7,417	230,242

In the case of Acct. 649, Directory Expenses, the Cost of Service study submitted in Case 26080 indicates that 56.01% of such expenses are incurred in producing the Yellow Pages and the remaining 43.99% in producing the White Pages. The former amount, \$29,734,000, should be allocated to special services, and the latter amount, \$23,353,000, should be allocated to exchange expense (customer-related). The allocation appears to omit aspects of the White Pages, such as bold face listings, which are in the nature of special services.

In accordance with the prior treatment of coin telephone as a special service, Acct. 648, Public Telephone Commissions, should be allocated to special services—in the amount of \$14,978,000. The Cost of Service Study indicates that portions of Acct. 640, General Commercial Administration, Acct. 643, Sales Expense, and Acct. 645, Local Commercial Expenses, also pertain to coin telephone.

[In thousands of dollars]

	Percentage	Amount
Account 640.....	4.05	1,108
Account 643.....	4.40	1,153
Account 645.....	4.93	5,076
Total.....		7,337

This amount also should be allocated to special services.

The balance of Acct. 640, General Commercial Administration, Acct. 644, Connecting Company Relations, and Acct. 650, Other Commercial Expenses, are allocated to general company purposes:

Account 640 (balance).....	\$26,238,000
Account 644.....	185,000
Account 650.....	892,000
Total.....	27,315,000

Acct. 642, Advertising, the balance of Acct. 643, Sales Expense, and the balance of Acct. 645, Local Commercial Expenses, are not susceptible to any wholly satisfactory form of allocation. However, some weight should be given to the fact that these expenses tend to be incurred to a disproportionately greater extent in connection with special services, or services associated with customer usage (such as toll service and specifically billed message units), than in connection with ordinary equipment rentals. Accordingly, in the absence of any better method of allocation, these expenses are allocated one-third to special services, one-third to exchange (use-related) and one-third to exchange (customer-related):⁴

⁴ This is a significant deficiency and should be remedied in future cost studies, perhaps by a sampling of the manner in which the time of commercial and marketing personnel is actually employed.

Account 642-----	\$4, 590, 000
Account 643 (balance)-----	25, 051, 000
Account 645 (balance)-----	97, 884, 000
Total -----	127, 525, 000
To special services-----	42, 509, 000
To exchange:	
Use related-----	42, 508, 000
Customer related-----	42, 508, 000
Total -----	127, 525, 000

To summarize, commercial expenses are allocated to the following cost categories:

General company purposes-----	27, 315, 000
Special services-----	94, 558, 000
Exchange:	
Customer related-----	65, 861, 000
Usage related-----	42, 508, 000
Total -----	230, 242, 000

C. Revenue Accounting Expense.—Revenue accounting expense was not segregated from total accounting expense in the Company's 1971 Annual Report. But company-wide revenue accounting expense in 1969, prior to any additions, was \$54,926,000. Accounting expenses have been increasing significantly, so a 1971 revenue accounting entry of \$60,000,000 probably would be close to the mark. Of this, 62.34% would be wages according to the Case 26080 Cost of Service Study, increasing the expense to \$68,562,000 ($\$60,000,000 \times .6234 \times .2289 = \$8,562,000$). A further increase to \$71,778,000 would be necessary to account for the AT&T license fee and revenue taxes. Finally, the revenue requirement associated with pertinent Company investment, \$5,171,000 (from Table 5), must be added for a total revenue accounting expense of \$76,949,000.

The Case 26080 Cost of Service Study indicates that 35.47 percent of revenue accounting is interstate toll, 9.95 percent is intrastate toll, 0.12 percent is telegram expense, 5.63 percent is local message expense, and 48.83 percent is "other billing expense." Of the "other billing expense," 13.99 percent (6.83% of the total) was allocated to special services, 0.80 percent (0.39% of the total) was allocated to exchange service, and the remaining 85.21 percent (41.61% of the total) was assigned to general company purposes.

Allocation of revenue accounting expense, accordingly, may be summarized as follows:

General company purposes (41.61 percent)-----	\$32, 018, 000
Special services (6.95 percent)-----	5, 348, 000
Exchange (usage) (51.44 percent)-----	39, 583, 000
Total (100.00 percent)-----	76, 949, 000

D. Other Expenses.—The remaining expenses of the Company are assigned to general company purposes:

General office expenses (other than revenue accounting)-----	\$77, 693, 000
Insurance-----	277, 000
Accidents and damages-----	1, 207, 000
Reconciliation of depreciation expense-----	164, 000
Reconciliation of balance for return (rounding error)-----	1, 000
Balance remaining in accounts for license fee, operating taxes, relief and pensions-----	16, 373, 000
Other expenses-----	15, 440, 000
Expense charged construction—credit-----	(12, 114, 000)
Total -----	99, 041, 000

VI. SUMMARY OF ALL COST ALLOCATIONS AND REVENUE REQUIREMENTS

Combining the capital-associated revenue requirements (from Table 5) with the allocated expenses not primarily associated with capital requirements yields the following results:

TABLE 6

[In thousands of dollars]

Source	Exchange				General company	Total
	Special services	Customer related	Use related	Demand related		
Capital associated revenue requirement.....	555,883	661,914		607,164	73,289	1,898,250
Traffic expenses.....	6,343		250,503		4,176	261,022
Commercial expenses.....	94,558	65,861	42,508		27,315	230,242
Revenue accounting.....	5,348		39,583		32,018	76,949
Other expenses.....					99,041	99,041
Total.....	662,132	727,775	332,594	607,164	235,839	2,565,504

The relative importance of the various cost categories may be summarized as follows:

	Percent of total	Percent of allocated costs
Special services.....	25.81	28.42
Exchange:		
Customer related.....	28.37	31.24
Demand related.....	23.67	25.06
Use related.....	12.96	14.28
General company.....	9.19	
Total.....	100.00	100.00

If telephone revenues are to be derived in proportion to allocable costs (*i.e.*, unallocable general company expense is prorated among the other categories), then approximately 28.5% of telephone revenues should be derived from special services (private lines, vertical services, coin telephones, yellow page advertising), approximately 31% should be derived from rentals of basic subscriber equipment (including ancillary charges for installations and rearrangements), and approximately 40.5% should be derived from charges for use of telephone equipment (toll charges and message units).⁵ However, since demand-related use charges are 1.82 times the usage charges unrelated to demand, the differential between charges for calling during peak periods and charges for calling during off-peak periods could be substantial.

Assume, for example, that \$30,000,000 in costs (\$20,000,000 demand-related and \$10,000,000 use-related) are incurred in handling a total of 400,000,000 calls (an average cost of approximately 7.3 cents per call). If the period 9:00 a.m. to 6:00 p.m. is the peak period for telephone usage generally, and 300,000 calls are made in that period, the costs incurred would be \$20,000,000 in demand-related costs and \$7,500,000 in use-related costs (75% of \$10,000,000) or \$27,500,000. The cost per call under these assumptions is 9.17 cents. By contrast, the total costs for the off-peak period are only \$2,500,000 (25% of \$10,000,000) and the cost per call is 2.5 cents per call.

However, not all telephone company switching and trunking equipment has the same peaking characteristics. If the same assumptions are used as in the preceding example, except that it is assumed that 80% of the company's switching and trunking equipment has peaks coincident with the system peak and the remaining 20% has peaks which occur at periods off the system peak, the costs would be as follows:

For peak period, \$16,000,000 in demand-related costs (80% of \$20,000,000) and \$7,500,000 in use-related costs (75% of \$10,000,000) for a total of 23,500,000 or 7.83 cents per call.

⁵ Where flat rates are employed, some portion of the flat rate charge may properly be considered a charge for average usage by flat rate customers.

For off-peak periods, \$4,000,000 in demand-related costs (20% of \$20,000,000) and \$2,500,000 in use-related costs (25% of \$10,000,000) for a total of \$6,500,000 or 6.5 cents per call.

The relative costs of peak and off-peak usage are dependent, therefore, not only on the extent of demand-related costs associated with telephone service, but also on patterns of traffic and the extent to which some portions of the system may have peaks different from the remainder of the system. Furthermore, differentials between peak and off-peak charges may cause shifts in traffic which in turn could require revisions in costs and prices (although at the same time achieving more efficient utilization of the system as a whole).

One final matter requires consideration. Where charges are made for a "package" of telephone services (e.g., equipment rental plus 50 message units, or equipment rental plus unrestricted local calling), average usage of the subscriber to such a "package" should be considered in order to determine whether all exchange costs (customer-related, use-related and demand-related) are being met.

VII. LIMITATIONS ON THE STUDY

This study was prepared to obtain an approximation of the nature of telephone costs and to suggest a means by which revenues might be structured so as to be responsive to such costs. However, there are a number of important restrictions on the direct use of the study.

(1) Costs were considered on a company-wide basis. No effort was made to segregate appropriate components for interstate and intrastate toll. It is recognized that, for present purposes at least, appropriate components for interstate and intrastate toll expense and investment should be separated in accordance with the Ozark Plan of Separations. However, after such components are separated, the methodology here employed could be used in connection with the investment and expense balances which remain in order to assess the appropriateness of special service charges, basic equipment charges, and message unit charges during peak and off-peak periods.

(2) Many of the allocations made in this study may have to be revised (a) because more recent data indicates different proportions than earlier data, (b) because further analysis indicates that alternate methods of allocation would be more appropriate, (c) because actual data is substituted for estimates, or (d) because, in the context of a more detailed cost of service study, greater refinement is feasible with respect to certain expense and investment items not attempted to be allocated (in whole or in part) in this preliminary study. In particular, the Case 26080 Cost of Service Study appears to make inadequate allocations to "special services" at various points, a tendency aggravated by the treatment of coin telephone as a special service in this memorandum (no allocations for central office equipment or outside plant were possible in the case of coin telephone).

(3) The proper treatment of otherwise unallocable overhead (general company expense) is always troublesome. Hopefully, this amount may be reduced by more intensive efforts at cost analysis, including the use of estimates where appropriate. But allocation of the balance which remains as otherwise unallocable overhead will require a larger exercise of discretion and judgment than other items.

(4) In order to determine prices in relation to costs, it is necessary to break down the costs into more refined categories than "special services" and various aspects of exchange service. Also, it is desirable to determine costs in relation to prices of exchange service in major geographical areas of the State. In view of the close relation of the great bulk of telephone costs to plant investment, and the manner in which other major expense accounts are kept (traffic, commercial and revenue accounting), a more detailed allocation should be feasible, to a significant extent from existing Company records.

(5) Needless to say, factors other than cost are important in determining telephone rates. It is not intended, by any views expressed in this memorandum, to indicate that other factors should not play an important role in the rate-making process.

EXHIBIT 3.—Letter From Mountain Bell to El Paso Telephone Co. Re Terms and Conditions For Providing STC-List 14 as an Interface Device

**MOUNTAIN BELL,
El Paso, Tex., September 7, 1972.**

**JIM HAMPTON,
Director of Marketing, El Paso Telephone Co., El Paso, Tex.**

DEAR MR. HAMPTON: You have requested our company to provide interconnecting units commonly referred to as "STC-List 14" for the purpose of an interface between the lines and facilities of Mountain Bell and various multi-line key system equipment being sold or leased by your company to third parties for their use.

You should be aware that the STC-List 14 is not presently offered by our Company as one of its regular tariff items; and particularly it is not normally offered by our Company under any circumstances as an interface with key systems.

We assume that you have available to you the Bell System Technical Reference PUB 42208, revised April, 1972. We direct your attention to Section 1.2 at Page 2 and Section 4.3 at Page 16. As is there indicated, the STC-List 14 was not designed for use with key systems.

Our Company has experienced difficulty in other states where attempts have been made to use the STC-List 14 as an interface with key systems. The problem has arisen primarily in attempting to have the STC-List 14 provide ringing for the key equipment. However, it is possible that your equipment may function without causing any difficulty.

If, despite the above information, you insist on using that device as an interface, we will provide it on the following terms and conditions:

1. This is a temporary, test offering and not a regular tariff item. As such, it will be provided on a special-assembly basis only.

2. This test offering is being made in the State of Texas only. In any other state in which Mountain Bell operates, the STC-List 14 will only be provided as an interface for key systems after an appropriate hearing and order from the state regulatory commission.

3. In the event that the use of the STC-List 14 as an interface with key systems caused that interface to malfunction, we will no longer provide it and will withdraw the STC-List 14 from those customers than using it.

4. In the event that it does become necessary to withdraw the STC-List 14 as an interface with Key Systems, customers then being served by it will have to comply with the then applicable Rules and Regulations of the FCC and any tariffs, rules and regulations on file by this Company with appropriate regulatory bodies. At the present time, these rules and regulations do not permit direct electrical connection of customer-owned equipment to the Telephone Company facilities except through an interconnection device.

5. We will appraise our joint customers for whom such devices are ordered of our Company's position and of the terms upon which we are providing the interconnection units.

We will, to the extent possible, appraise you of our experiences with the STC-List 14 insofar as they concern any troubles related to use as an interface with Key Systems.

Your attorney, Mr. Sheehy, in conversations with our Company attorney, Denis G. Stack, indicated that he had information that Southwestern Bell and Illinois Bell were using two outside manufacturers of the STC and could provide them within a two-week interval from the date of a firm order for installation. We mention this because it has been our Company's experience that, in fact, an interval of four weeks has been more realistic; and recently supply problems have, in some cases, increased that interval even further. Mr. Sheehy was very general in his remarks, and we have been attempting to ascertain the names of the outside manufacturers or the names of any persons in purchases. Inquiries made to date by our General Office have not shed any light upon this situation. Our best information is that the System specifications is the Elgin Company and that its entire production is being purchased by Western Electric who, in turn, supplies all of the Bell System Companies, including Mountain Bell. Unless these units can be obtained from some source other than Elgin and Western Electric, you should be aware that there may be problems meeting the interval of 28 days or four weeks after order. We would appreciate any detailed information you can provide as to outside suppliers.

Please direct all inquiries concerning installation intervals to me at telephone number 543-2424, I will have responsibility for coordinating contacts between Mountain Bell and your company. I will also furnish you the current prices for STC-List 14 equipment.

If you have any questions, please feel free to call.

Very truly yours,

JACK JOYCE,
Marketing Manager.

EL PASO TELEPHONE CO.,
A SUBSIDIARY OF SAN ANTONIO TELEPHONE CO., INC.,
September 8, 1972.

Mr. JOHN LANGFORD,
El Paso, Tex.

DEAR JOHN: As per our personal telephone conversation of today, please find enclosed a photocopy of a letter written September 6, 1972, by Mountain Bell Telephone Company to H. Carroll Lee Construction Company.

Your immediate attention to this matter will be appreciated as we cannot let Bell continue this type of harassment.

Sincerely,

K. D. WARFIELD, *President.*

Attachment: Bell letter dated Sept. 6, 1972.

MOUNTAIN BELL,
El Paso, Tex., September 6, 1972.

H. CARROLL LEE,
*H. Carroll Lee Construction Co.,
El Paso, Tex.*

DEAR SIR: We have received an order for three STC-List 14 interconnect devices from the El Paso Telephone Company acting as your agent. These devices are to be used as an interface between your multi-line key system telephone equipment provided by El Paso Telephone Company and the facilities of Mountain Bell.

These devices are not provided or offered by Mountain Bell as one of its standard tariff items for use with key system telephones. They were not technically designed to be used as an interface for key systems; and you may or may not experience trouble with your equipment. However, we do offer other devices for use with key systems.

We will provide these devices on a special-assembly basis. If, the use of the STC-List 14 as an interface with your key system caused the interface to malfunction, we will no longer provide it and we will withdraw it from those lines which it may be serving.

In the event that it does become necessary to withdraw the STC-List 14 as an interface with your key system, you will then have to comply with the then applicable Rules and Regulations of the FCC and any tariffs, rules and regulations on file by this Company with appropriate regulatory bodies. At the present time, such rules and regulations do not permit direct electrical connection of customer-owned equipment to the Telephone Company facilities except through an interconnection device. It will then be necessary for you to modify or reconfigure your equipment to meet whatever interconnection devices which would be available at such time.

If you have any questions concerning this matter, please feel free to call upon me. 543-2424

Sincerely,

JACK JOYCE,
Marketing Manager, Interconnection Coordinator.

EXHIBIT 4.—*Prepared Statement of Frank Rodio, Jr.*

PREPARED STATEMENT OF FRANK RODIO, JR., PLANNING AIDE, CAMDEN COUNTY, N.J., PLANNING DEPARTMENT

AN ANALYSIS AND CRITIQUE OF S. 1167

Mr. Chairman and distinguished members of the subcommittee on antitrust and monopoly: The day your Chairman, the distinguished Senator from Michigan, introduced Senate Bill 1167 on the floor of the United States Senate may

well turn out to be the most eventful and fateful day in the history of the erstwhile American free enterprise system.

American capitalist entrepreneurs have overstepped their bounds within the last decade. They were protected to a certain extent by our Founding Fathers during the long hot Philadelphia summer of 1787 in the drafting of the Constitution.

Until the twentieth century's "Great Depression" and the advent of the Keynesian economic philosophy of government intervention into and regulation of the erstwhile American free enterprise system, a governmental policy of laissez-faire or "let it alone" existed.

Responsible government officials realized such a policy would not do. Also, as we approach the bicentennial of United States independence, corrective legislative measures such as Senate Bill 1167—the "Industrial Reorganization Act" should receive favorable consideration.

While a "laissez-faire" governmental economic philosophy and policy seemed alright for an infant republic seeking its "Manifest Destiny," the Founding Fathers of 1787 did not reckon with a billion dollar gross national product or U.S.A. multinational corporations.

Senate Bill 1167 should deal with the economic cancer of inflation as well as multinational corporations.

Thank you.

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